

**UNIVERSITI TEKNOLOGI MARA**

**FOOT POWERED WASHING  
MACHINE**

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## **ABSTRACT**

In this modern era, a variety of products require electricity to do something fungal. The washing machine is a very important machine in everyday life. The electric washing machines used in these days are used to wash clothes and dry the laundry. Without electricity, how can human wash clothes easily? So, this project was created to make life easier when the power supply was cut off. The project can also help humans save water and electricity. The pedal used will generate a spin and move the machine. The drum rotates around a horizontal axis and is more water-efficient. The machine will spin, using less water and detergent. The impeller spins or rotates in place, which rubs clothes against each other. This friction works to clean the clothes. Next, this project used morphological analysis to create the final design, the internet for research, and publications as a guide to make my task easier. In conclusion, this project expected to be successful and can be used well.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 BACKGROUND OF STUDY

Over the course of centuries, the technology for washing clothes has evolved from crude manual labor to high tech. Hundreds of years ago, humans washed clothes by licking clothes on rocks by the river or the beach. Laundering by hand involves soaking, beating, scrubbing, and rinsing dirty textiles. [1], [2]The entire process often occupied an entire day of work, plus drying and ironing.[3] In year 1691, the first English pattern of washing machine was issued and at 1767 Jacob Christian Schaffer has published a washing machine as shown in Figure 1. The Thor washing machine, introduced by Alva J. Fisher in 1908, was one of the earliest electric models. It featured a drum and an electric motor to rotate the clothes. By the 1920s, electric washing machines became more common in households, though the washing machine were still relatively expensive and often found only in wealthier homes.[4] As known, the washing machine is an extremely important machine in the routine of human life. So, in this century, electric washing machines have become the focus of buyers. But what if power supply is cut off over a period of time? Do human need to go back to the old-fashioned laundry application of washing clothes by scrubbing clothes on the surface of rocks to get rid of dirt?



Figure 1.1: Illustration of Schaffer washing machine at 1767[5]