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Electricity Generation Using Footstep

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Abstract: *Energy is the primary need for survival of all organisms in the universe. Everything that happens in the surrounding is the expression of flow of energy in one of the forms. But in this fast-moving world, the population is increasing day by day and the conventional energy sources are lessening. The extensive usage of energy has resulted in an energy crisis over the last few years. Therefore, to overcome this problem we need to implement the techniques of optimal utilization of conventional sources for conservation of energy. This project includes how to utilize the energy when a person moves on the tiles. Energy is the main concern of the present day. The production of electric current in a huge amount is the need of today's world. There are different methods used for the production of energy like conventional and non-conventional methods. Here we have represented the non-conventional method for the production of electric current. This non-conventional method is "Footstep power generation Mechanism" where the energy is produced by moving the human on a moving plate in which rack and pinion gear are used to convert the physical energy into mechanical energy and further, they have converted into electric energy by using the dynamo. By using this method, we have produced the energy to light up the bulb. We also represent the simulation of the footstep power generator using the ansys 17.0 software. By the results it seems we produce the power. This project is cost effective and easy to install in a populated area like railway station, bus stands and in shopping malls. Our project is cost effective and easy to implement.*

Keywords: Energy, Footstep Power Generation Mechanism, ANSYS, etc.

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