LOG SPLITTER

PROJECT REPORT

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ABSTRACT

Firewood is extensively used as a fuel throughout the world for various purposes. Until the advent of LPG cylinders for cooking, firewood was the main fuel used for fire. Even after LPG cylinders arrived, firewood is still being widely used in household cooking, hotels, canteens, boilers etc. The firewood has to be cut and split into smaller sizes to use it for cooking. This splitting of wooden logs is still being done by axe. In the present situation, we see that the cost of manual labour is very high and it is hard to find one too. Splitting of wooden logs using an axe requires considerable strength and skill. It is a tedious job and is slow. Hence there is a need to reduce the manual effort in log splitting and make the work easier and faster .This leads to the design of the log splitter which is affordable even in rural areas and is highly useful and economical in the long run. In this machine, an electric motor is used to rotate a cone shaped tool that has a taper thread. When the log is fed against the tool, the tool draws the log in towards itself due to the action of the screw. At the same time, since it is a taper thread, the diameter of the tool increases as the log travels along the length of the conical tool. Thus the wooden log gets split.