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Electric Fencer

Electric Fencer is a barrier that uses painful or even lethal high-voltage electric shocks to deter animals or people from crossing a boundary.

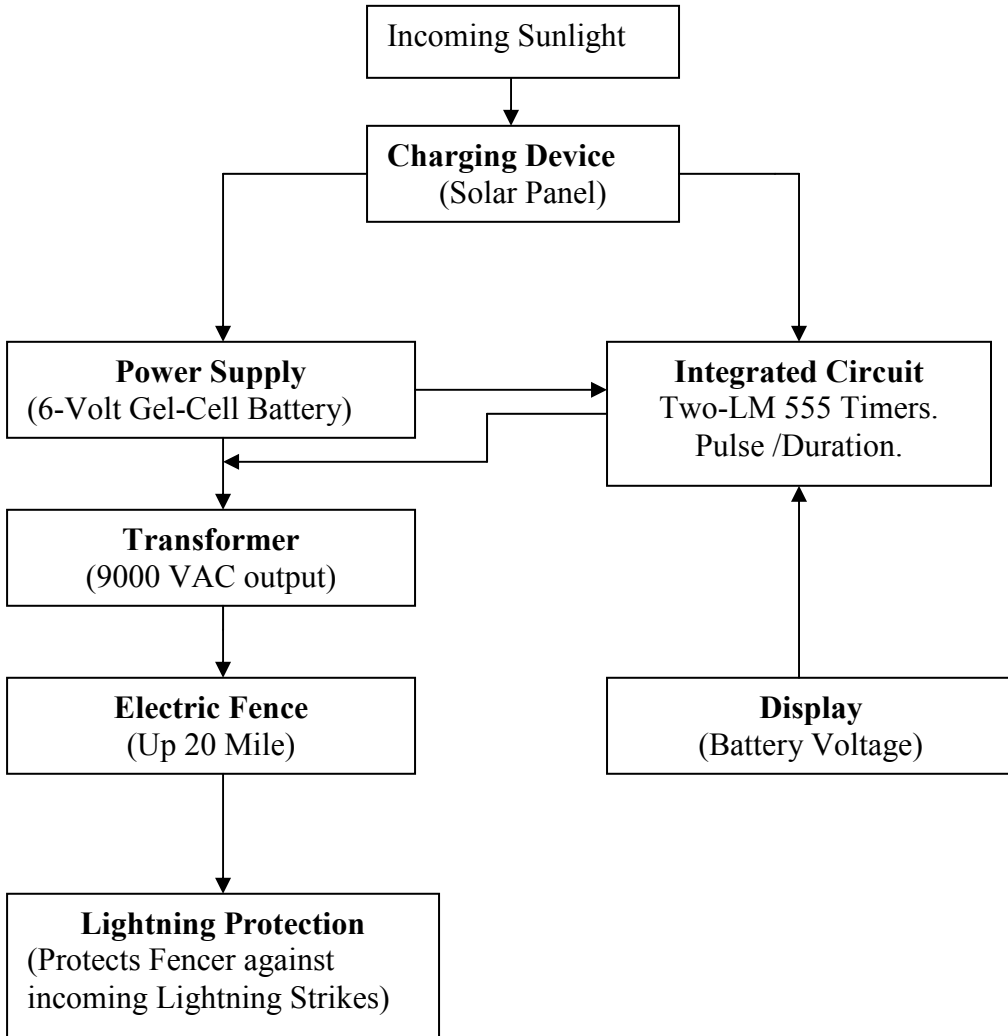
This is a common device used by many farmers to control their livestock. The idea that I have will help the farmer achieve maximum results without breaking his or her pocket book.

The project that I'm going to do is a little out the ordinary. The Electric Fencer is going to be like a basic one but with added features to try and help the rancher to better control his livestock and save him time and money.

The problems that most ranchers encounter when using an electric fencer is that they are not able to check how hot the fence actually is due to not having any output readings visible. Another problem that they encounter is that the majority of the fencers just have a blinking light to indicate whether or not it is on/off and no indication if there are weeds or foreign objects on the electric fence. The reason that the majority of the electric fencers fail to have a long life expectancy is because the fence is like a big lightning rod.

The main reason I would like to develop or design this new kind of electric fencer is because we have a lot of cattle and we rely a lot on electric fencers to keep cattle on temporary feeding grounds. The voltage display that I want to integrate on the fencer will indicate the voltage of the battery to tell the owner whether or not it is still maintaining its charge. This will prevent a rude awakening some morning to find out that the battery shot craps and you have cattle everywhere they aren't supposed to be. It will act as a pre-warning device to let you know if it is time for a new battery or if the solar panel is taking in enough sun to keep up. The voltage display having a current output indicating how much foreign debris is on the fence will save you a lot of time because otherwise you must drive along the whole fence to check for this. Fences sometimes can be several miles long. The majority of the fencers that we have sometimes only last a couple of years and most of the time are because of lightning hits. It can be very costly to buy new electric fencers every couple of years. If I can integrate some kind of lightning protection on the fencers it could prolong its life expectancy and save you some money in the long run.

Block Diagram



Current Schematic

