

Electricity on National Highways and Railways (IDEA)

This innovation is by Mr. A. D Nagendrappa, Advocate, from Bangalore, related to the production of electricity on national highways through the movement of heavy vehicles. During the day, at least four-five vehicles pass by every on the national highway. So a method for production of electricity has been developed.

It consists of (a) inclined plate (b) connecting rod (c) crankshaft (d) counter weight (e) free wheel (f) flywheel (g) coupling (h) generator (i) electrical storing unit. An inclined plate is hinged and fixed to a metal frame and a connecting rod is kept to the bottom of that metal plate. The other end of the connecting rod is attached to a crankshaft and this goes to the flywheel through a free wheel. A counter-weight is attached to the crankshaft before the free wheel so that the inclined plate is always in inclined position to maintain equilibrium. After this the flywheel is connected with a coupling to a DC Dynamo/Generator. This dynamo/generator is connected again through wires to the electrical storing unit to store or to convert it to AC power through a converter.

When a moving load passes over the inclined plate, the connecting rod moves in the downward direction and activates the crankshaft to rotate for a while. As a result, the dynamo/generator also rotates and electricity is produced. In the meantime, the inclined plate comes to its original position with the counter-weight through the free wheel. And it waits for the next pressing by another moving heavy vehicle. Thus, the process can continue again to rotate the generator to produce electricity, till the moving loads continue to pass on inclined plate. This electricity can be stored in the storing unit for further utilization.