Statement of the project;

The door bell voltage transformer is a device including a voltage source, an iron core magnet a brass spring and a switch. An electromagnet is made out of a homemade coil with an iron core when the point contact switch is closed. The electromagnet attracts the screw on the brass spring and pulls it away from the point contact switch breaking the circuit. The switch is now opened and the current flow stops in the coil and the collapsing magnetic field induces a large voltage across the coil.

List of parts:

02 D Cells Batteries (1.5 V x 2)

01 Brass spring

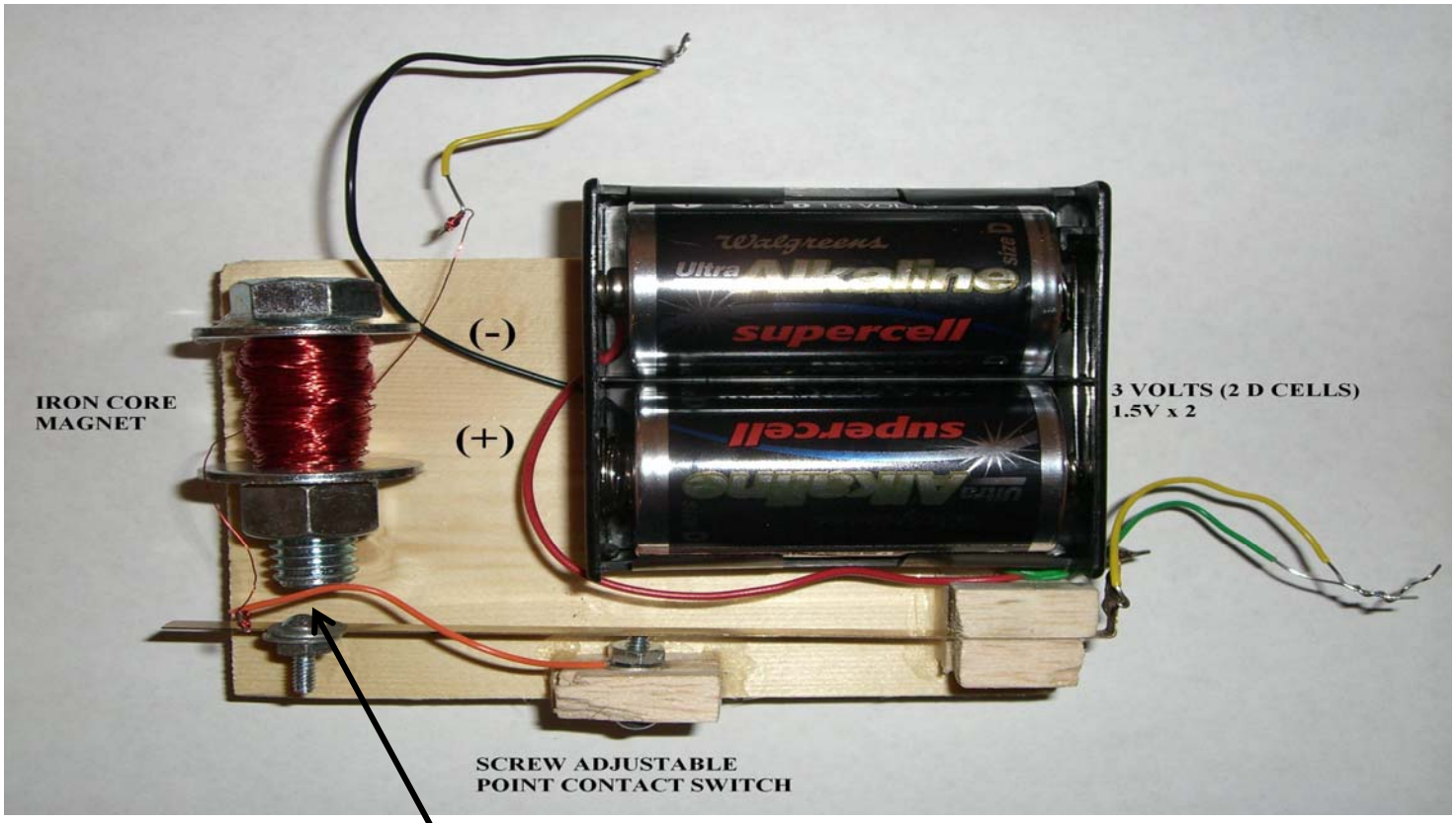
02 Adjustable screw

Coil wire

Batter holder

Schematic + Testing;

First attempt: (The device did not work)



The magnetic field is not powerful enough to attract the screw on the Brass spring and break the circuit.
The Brass spring cannot touch the magnet.

<u>Solution:</u>
There was not enough coil wire on the Iron core.
The Iron core magnet had to be rebuilt with more coil wire.