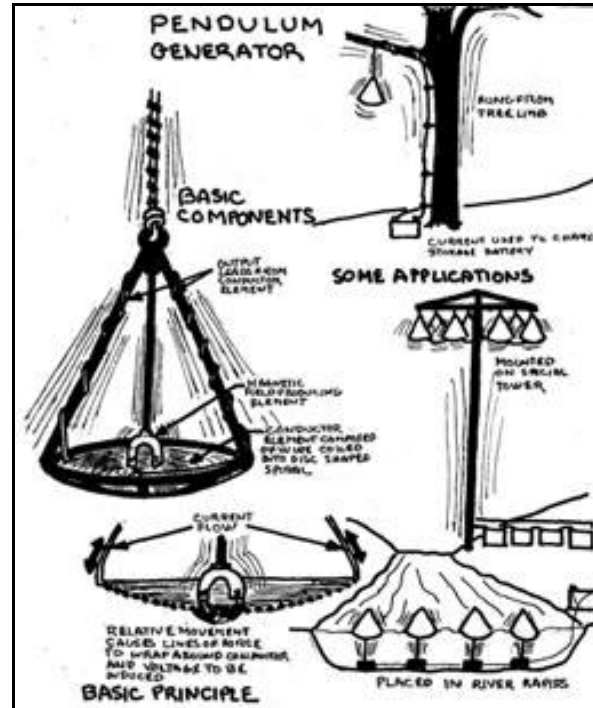


Vibrational Electric Generators

One last device...



This invention turns wasted vibrational energy into electricity. Every swaying tree, bouncing roadway, and turbulent stream becomes a source of power.

The idea was prompted by the electrical devices that I studied when writing automotive textbooks with Claud Hunter. Before doing those books, I had no idea how such stuff works.

Resolving ignorance always inspired me to grandeur.

This was my last invention of a physical thing (as opposed to metaphysical, metaphorical and software things). By 1980, I understood that conceiving a device is easy, but, that developing one requires certain knowledge and skills. Earlier, I would have ignored such practical considerations. Now, for some reason, I could not.

So, after creating a Record of Invention and contacting, half-heartedly, a few companies, I buried this small corpse in a box beside the Tetra Triangular Building System.

Following is the Record Of Invention.

RECORD OF INVENTION

I have invented a group of related methods for generating electricity. Each method provides a simple, inexpensive means for tapping common energy sources. Some of these energy sources have never been used before in the production of electricity. None have been used in the manner described.

Like all other mechanical means for generating electricity, these new methods make use of relative motion between a magnetic field and a conductor. As in the prior art, voltage is induced in the conductor as it crosses the magnetic flux lines.

The difference is in the relative motion between the field and the conductor. Instead of a completely circular relative motion (which is common in devices that convert steam, hydraulic or wind energy into electrical potential) my methods use vibrational relative motion. In other words, instead of having a stator and a rotor, embodiments of my invention have a stator and a vibrator.

The vibrator can either be used as the magnetic field producing element or the conductor element. In either case, relative motion between the stator and the vibrator is derived directly from the energy source. No intervening mechanisms (windmill blades, turbine wheels, water impellers, steam motors) are required. Nor is any alteration of the environment necessary. In this sense, my invention is a passive method of tapping energy sources.

Virtually any vibrational source (high or low frequency, natural or man-made, actual or potential) can be used. For instance, the energy of swaying trees, towers or buildings can be converted directly into electrical potential....as can the movement of surf or waves, the undulation of river rapids, the movement of road pavement caused by traffic, the vibration of air... even the seismic activity of the earth itself.

The basic technique for putting these methods into practice is to let either the magnetic field producing element or the conductor element be preferentially responsive to the source of vibrational energy.

INVENTED BY: Thomas Gold Weatherly, Jr. DATE 5/17/80

WITNESSED AND UNDERSTOOD BY: Frank A. Hammel DATE 5/18/80

PAGE 1 OF 5 Thomas Gold Weatherly, Jr. DATE 5/19/81

The technique is illustrated in the relationship between a bell, clapper and rope. The rope, as it is pulled, becomes a vibrational energy source. The bell is preferentially responsive to the energy source so it moves back and forth while the clapper, owing to its inertia, remains relatively stationary. When struck by the clapper, the bell rings. The bell also rings if the system is exposed to high winds or earth tremors. The preferential response to energy sources holds true in either case.

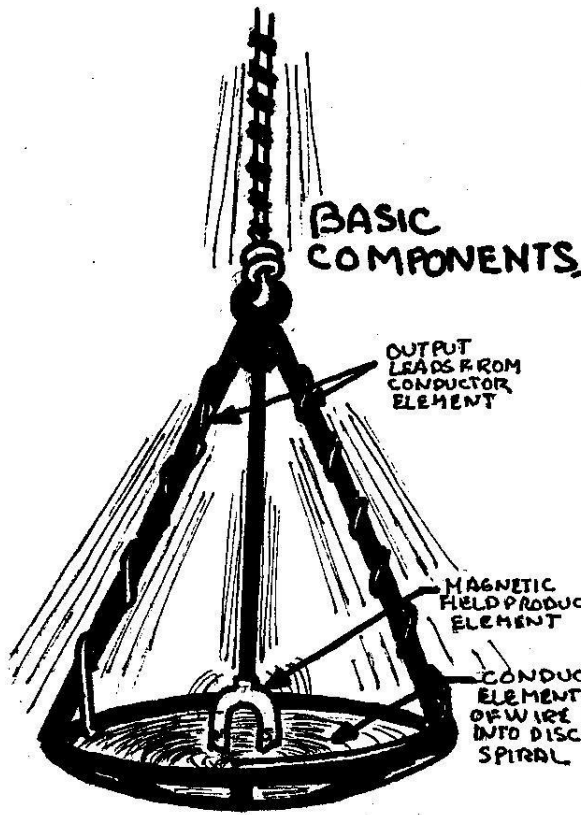
The following figures illustrate a few embodiments of my invention. After reading this description and viewing these figures, other embodiments will no doubt be evident to those skilled in the art.

INVENTED BY: Thomas Gold Weather, Jr. DATE 5/17/80

WITNESSED AND UNDERSTOOD BY Frank A. Hamrick DATE 5/18/80

PAGE 2 OF 5 Thomas L. Weather DATE 5/19/80

PENDULUM GENERATOR

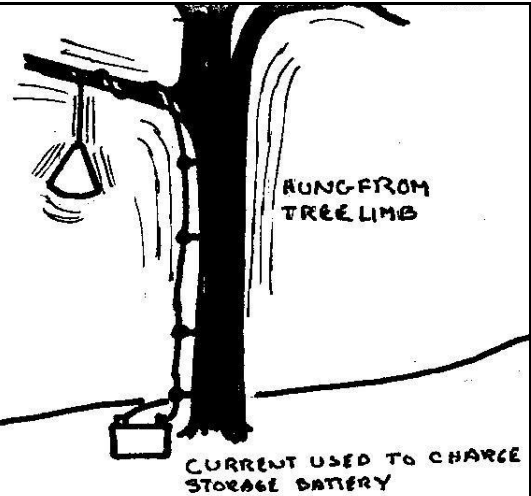


BASIC COMPONENTS

OUTPUT LEADS FROM CONDUCTOR ELEMENT

MAGNETIC FIELD PRODUCING ELEMENT

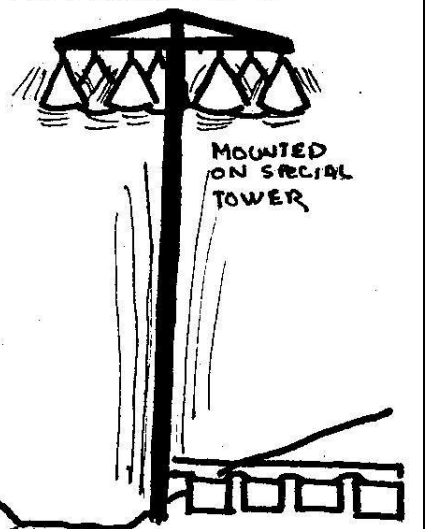
CONDUCTOR ELEMENT COMPOSED OF WIRE COILED INTO DISC SHAPED SPIRAL



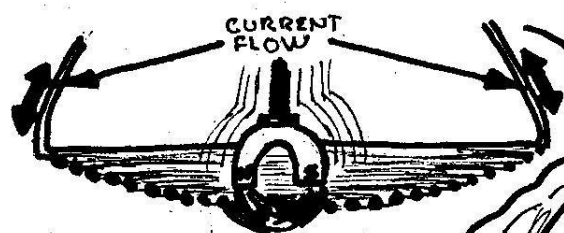
RUNG FROM TREE LIMB

CURRENT USED TO CHARGE STORAGE BATTERY

SOME APPLICATIONS



MOUNTED ON SPECIAL TOWER



CURRENT FLOW

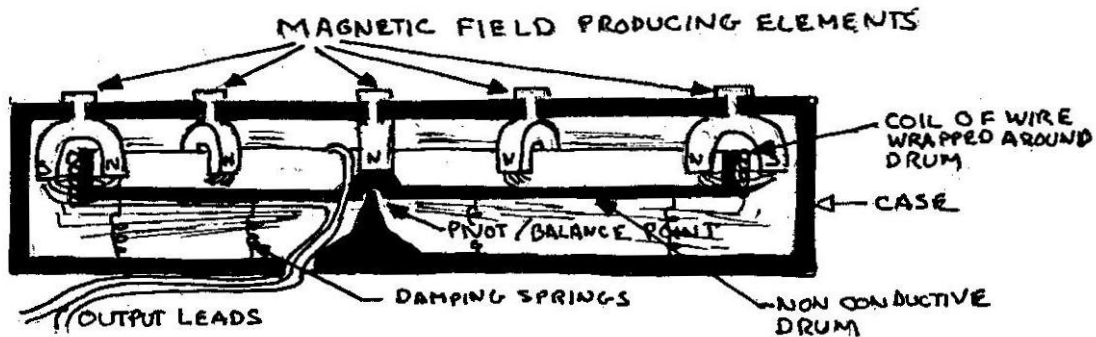
RELATIVE MOVEMENT CAUSES LINES OF FORCE TO WRAP AROUND CONDUCTOR AND VOLTAGE TO BE INDUCED

BASIC PRINCIPLE



PLACED IN RIVER RAPIDS

VIBRATING DRUM GENERATOR

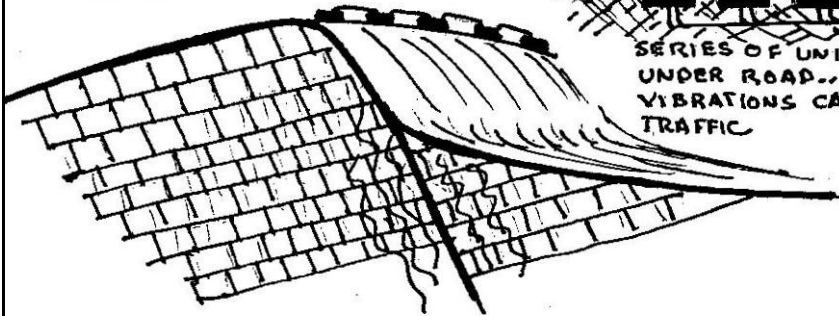


BASIC PRINCIPLE....

WHEN DRUM WOBLES AND VIBRATES ON PIVOT POINT, LINES OF FORCE WRAP AROUND WIRE, INDUCING VOLTAGE AND CURRENT FLOW

SOME APPLICATIONS

PLACED IN REGIONS OF HIGH SEISMIC ACTIVITY... RESPOND TO EARTH TREMORS.



SERIES OF UNITS MOUNTED UNDER ROAD... RESPOND TO VIBRATIONS CAUSED BY TRAFFIC

INVENTED BY: Thomas Gold Weather, Jr. DATE 5/17/80

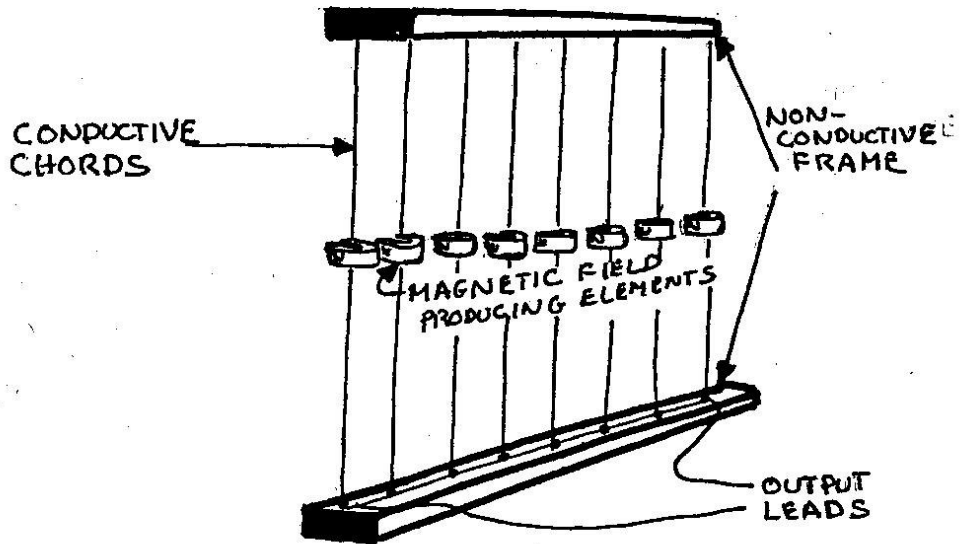
WITNESSED AND UNDERSTOOD BY Frank A. Hammer DATE 5/18/80

PAGE 4 OF 5

Thomas L. G. Jr. DATE 5/19/80

VIBRATING CHORD GENERATOR

BASIC COMPONENTS



BASIC PRINCIPLE

CHORDS ARE TUNED TO VIBRATE IN WIND. AS CHORDS MOVE BACK AND FORTH IN FLUX LINES, VOLTAGE IS INDUCED.

APPLICATIONS

PLACED WHEREVER WIND BLOWS, INCORPORATED INTO SUSPENSION BRIDGES, ETC.

INVENTED BY: Thomas Gold Weather, Jr. DATE 5/17/80
WITNESSED AND UNDERSTOOD BY Frank A. Hamid DATE 5/18/80
PAGE 5 OF 5 Thomas L. G. Jr. DATE 5/19/80