

Stubblefield - Wireless Telephone

In 1892, ignorant of the wireless inventions of the past 60 years, Nathan creates an electromagnetic induction wireless telephone and demonstrates it to his friend Rainey Wells. A few years later, Nathan develops a superior wireless telephone that uses natural conduction through the earth and water.

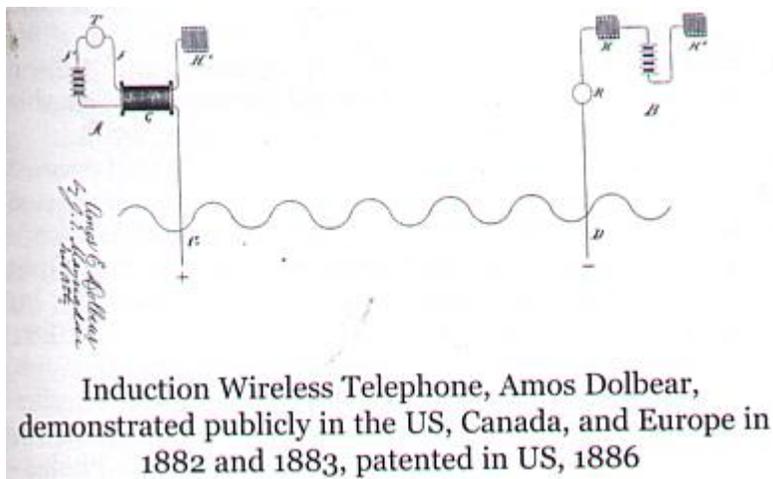
Bob Lochte has done an enormous amount of work uncovering papers, notes and pictures, and quotes on Nathan Stubblefield. There is one puzzling thing to me about the Stubblefield device. It seems to me that Tesla is standing in one of the pictures. I have checked the references and, yes, Tesla is in the picture. Now that I understand this, it brings me to the conclusion that the waves Stubblefield used were longitudinal in nature.

Even without Stubblefield, Marconi still wouldn't be the true inventor of radio - Nikola Tesla invented it before Marconi. Marconi, in fact, used Tesla's own patents as research materials. **Tesla, in turn, was among the curious onlookers in attendance at Stubblefield's 1902 wireless demonstration in Philadelphia.**



Nathan Stubblefield, far right, and a group of witnesses at Belmont Park, Philadelphia, May 30, 1902. Edwin Houston is just to the right of center, holding a telephone receiver to his ear. A. Frederick Collins is second from left.

Stubblefield also developed a battery to power this system and a motor, that we will get into later. Now around 1878 Amos Dolbear files a patent on what he called induction wireless telephone, demonstrated publicly in the us, Canada, and Europe in 1882 and 1883, patented in U.S. 1886. What is amazing to me is that the patent uses an elevated capacitance. So this is not the same as a Hertzian wave transmitter. It is very clear that the capacitance acts as the antenna and the return is using the earth as ground. The induction coil is used as a high self-inductance only, creating a very high potential or stress in the aether.

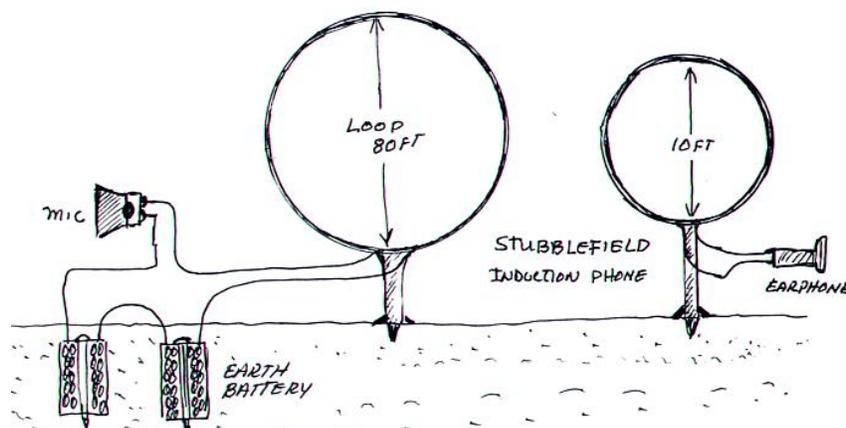


Now, " Tesla writes later on about the transmitter that he was developing, "I attacked vigorously the development of my magnifying transmitter, now however, not so much with the original intention of producing one of great power, as with the object of learning how to construct the best one. This is essentially, a circuit of high self-induction and small resistance (key words coming up) which in its arrangement, mode of excitation and section and action, may be said to be the diametrical opposite of a transmitting circuit typical of telegraphy by Hertzian or electromagnetic radiations."

What Stubblefield had discovered and what he do with his system.

Stubblefield was experimenting with ground radio since 1882, but did not patent his developments until much later. Credible witnesses saw his ground radio experiments in action during this time frame, establishing the historical priority of Stubblefield. While Marconi could barely send telegraphic "dots and dash" signals with great difficulty through a static-filled medium, Nathan Stubblefield had already transmitted the human voice with loud, velvet clarity. Others would adopt and implement the Collins system (Fessenden, DeForest, Bethenod, Braun), but none could duplicate the Stubblefield System.

Nikola Tesla performed double ground experiments with impulses as early as 1892, reporting these in lectures and patenting some embodiments in 1901. Not one of these later systems ever achieved the same results of clarity, tone, and volume of Stubblefield ground telephony. Tesla apparently never discovered the true power points which powered Stubblefield's device. Priority in all these arts belongs to Nathan Stubblefield alone. In addition, his was the only system in which natural energies were obtained, magnified, and entirely employed as the empowering source. All other inventors used "artificial" sources (batteries, alternators, dynamos).



Following all these ground radio demonstrations, Stubblefield researched "Magnetic Waves" and developed several systems which did not use ground terminals for exchanging signals. Long distance wireless telephone communications were his aim. Many imagined this to be radio as we know it, but several features of Stubblefield aerial are distinctive and different.

First his transmitters and receivers were telephonic, not telegraphic. In his preliminary experiments, the earth battery was used to energize an apparatus to which was connected a long horizontal aerial line. Marconi later adopted this "bent L" symmetry in conjunction with a grounded copper conduction screen. There are no photographs of these arrays, but I have hand-written manuscript copies of certain diary notes in which a progressively greater telephonic distance is reported. Nathan Stubblefield made steady progress in this form of telephonic transmission, but used neither alternators nor spark discharge.

Mr. Stubblefield reasoned that, since electrical waves traverse the whole earth, it might be possible to send signals to distant places. These ground-permeating natural electrical waves might serve as carriers for the human voice. The ground would act as both power generator and signal conductor. Like a gale carrying messages downwind, these electrical waves could bring wireless communications instantly to any part of the world.

These transmissions were made through the ground itself and used the Stubblefield cell for power. In several photographs we see special loud speaking telephones outfitted with (1 foot) horns, designed to act as annunciators. Calls from these annunciators brought his son Bernard to the telephone transmitter. The system was never switched off. Power was limitless and did not diminish with time of the day or length of use.



Natural observations in systems led to unexpected, theory-busting discoveries. Such an effect demonstrates that an articulate quasi-intelligent energy permeates the natural environment.... an energy of which electricity is a minor part.

Two more mysteries have lingered from this latter period of invention in the Stubblefield biography. The nature of each reveals the extent to which he had developed and advanced his new earth power technology. Nathan continued to pursue his experiments, but little was seen of him for long time periods. Alone and tired, Nathan stopped working his farm completely.

Later, Investigators entered his land area and found heavy wires leading from the roots of trees. To these wires were attached small arc lamps, hung in the trees. These were extinguished. They imagined the arc lamps to be the explanation of his hillside sunlight. Their hasty analysis proved problematic from stories which witnesses report. The warm and diffused sunlight which came

from the ground itself around his house was not localized in specific lamps. The light came from the ground, not from the trees as before... a "whole hillside that would blossom with light"... "lit up like daytime". These observations indicate that Stubblefield had managed indeed the direct conversion of earth energy to light and warmth. This would be acceptable, were Mr. Stubblefield simply working on a newer form of drawing electricity from the ground to light small arc-lamps; a feat which he had accomplished earlier. But these kind persons could never find any evidence of arc-lighting or any other form of known lighting anywhere near the area. In their own words "the light seemed to come out from the ground itself".

In addition to ground sunlight effects, many heard very loud and unfamiliar noises coming from the whole area surrounding his cabin. What could this be? Had he managed to directly transduce the natural impulses of the ground energy into audio?

His last claim two weeks before his death was made to a kind neighbor: "The past is nothing. I have perfected now the greatest invention the world has ever known.... I have taken light from the air and earth.... as I did sound."

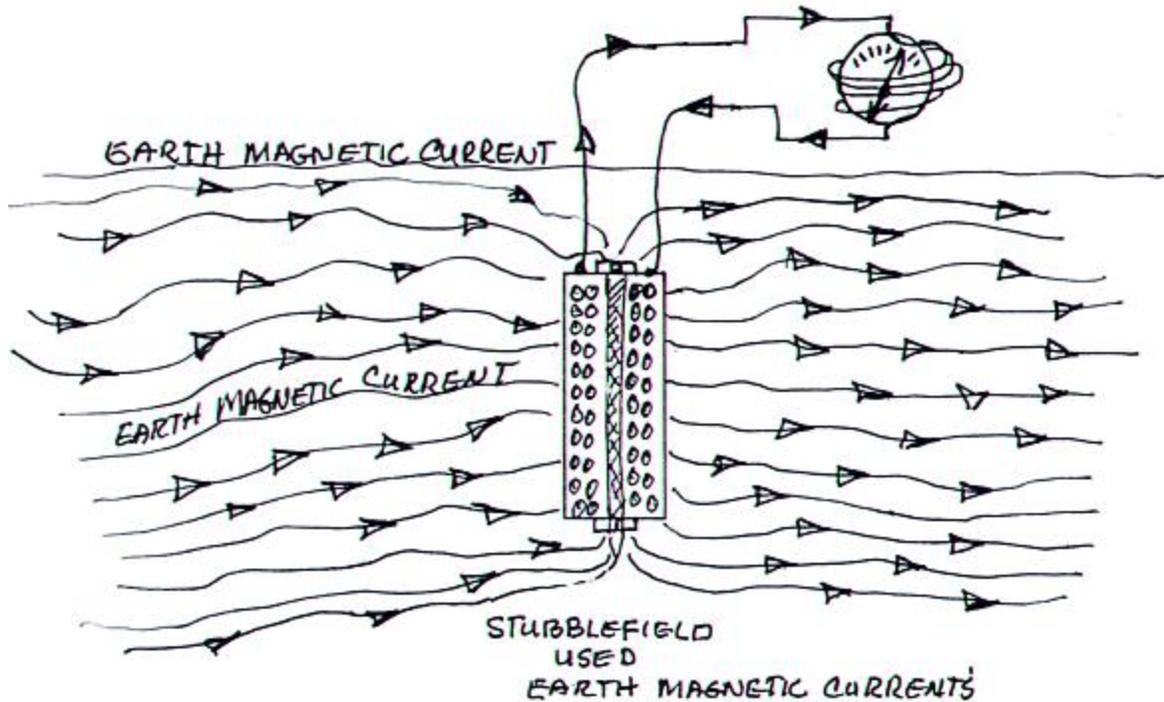
Neighbors had not seen Nathan for several days. As they were worried about his health, they attempted to call on him. The lock was secured from the inside. It was a lonely, cold and rainy March day when old friends and neighbors broke the lock on Nathan's cabin and entered. He had passed away in his bed, the probable victim of malnutrition and fatigue. They all noticed that the interior of the cabin was "toasty warm", as if heated by a strong fire. Moved to locate the source of this heat, town officials found "two highly polished metal mirrors which faced each other, radiating a very great heat in rippling waves" This is a great discovery. It fulfills what Nathan reported in his last testimony.

This picture was sent in by Gandolf Gwynn. He wanted to know who was hiding behind the tree? The man behind the tree is Dr. Will Mason.



RECEIVING A MESSAGE.

The rods in the picture are about 20 feet apart in a straight line. Nathan Stubblefield receiving a message.



Nathan Stubblefield used earth magnetic currents. this is not current as we know it. Electricity is a wasted product of this magnetic current.

The Electrical Ocean.

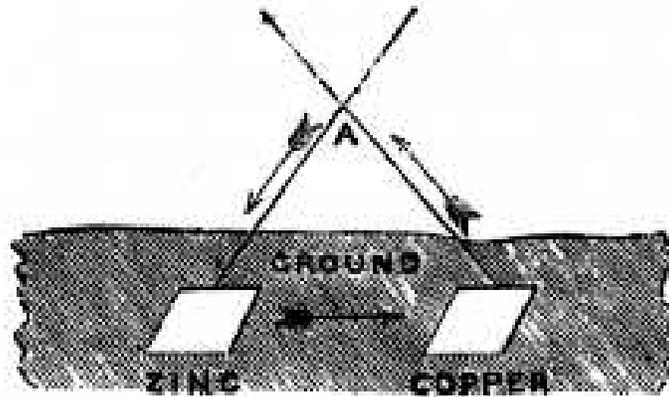
If you are building an earth battery it is best to do it as the patent calls out. This means that you should not use anything that causes a forced voltage. It was not until later that people used sulfur cakes and other acids to get the voltage higher with bigger currents. That is a phony system and not Free Energy.



Alexander Bain

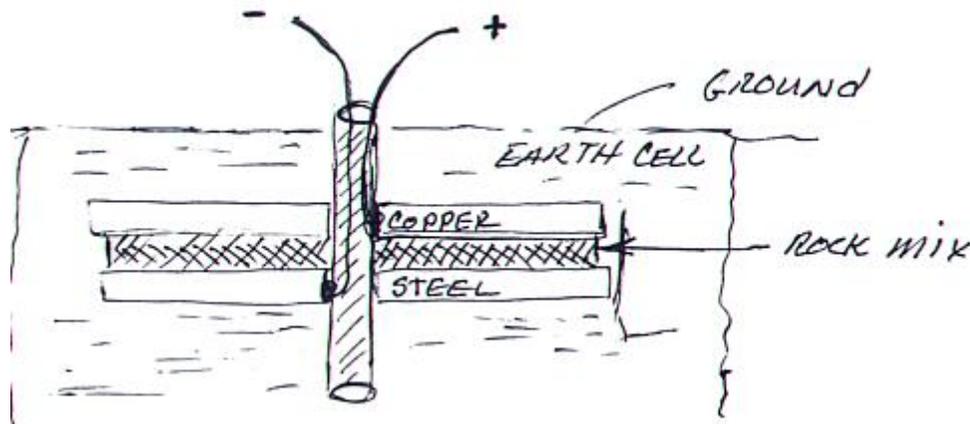
We found a good number of earth battery designs in the Patent Registry. The earliest designs appear in 1841 when Alexander Bain applied the phenomenon to telegraphy. While working a telegraph line, he chanced to discover that his leads had become immersed in water. This short-circuit through earthed water did not stop the actions which resounded through his system. Mr. Bain took the next step to greater distance, burying copper plates and zinc plates with a mile of ground between them. When connected to a telegraph line, these performed remarkably well

without any other battery assistance. Bain obtained the patent for his earth battery years after his initial discovery (1841), using it to drive telegraph systems and clocks. (real free energy system using earth energy only)

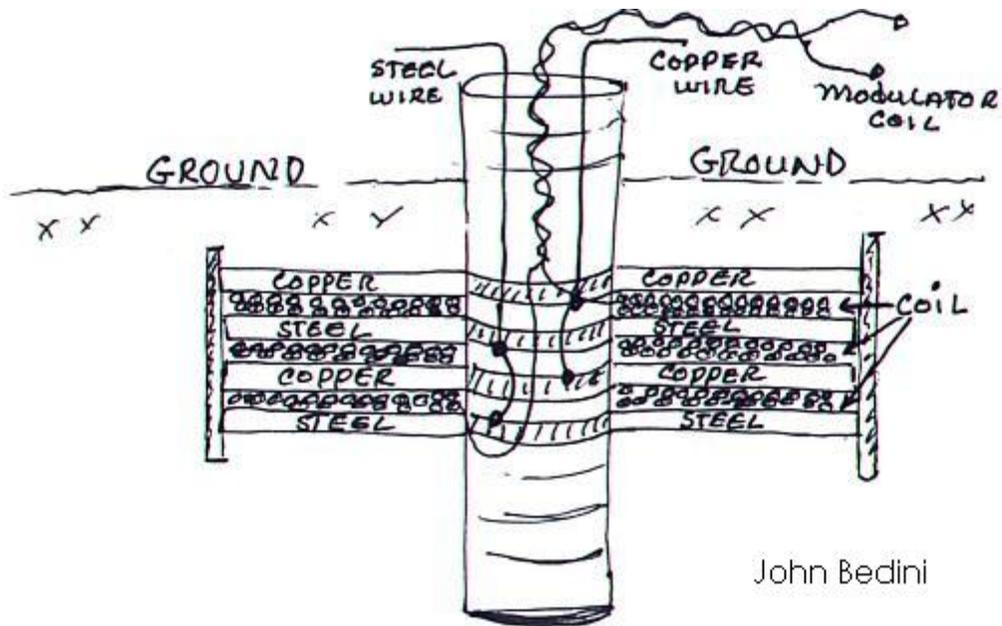


Stephen Vail (1837) observed the same effect, not knowing what caused it. The establishment of the first functional telegraph line seemed to require even fewer batteries with time. Vail began with some twelve large battery cups, reducing them gradually until only two were needed. There came a point during certain operative seasons where he found it possible to remove all the batteries!

J.W. Wilkins in England (1845) corroborated findings made by Bain, developing a similar earth battery for use in telegraphic service. An early English Patent appears in 1864 by John Haworth, the first true composite earth battery. This battery is drum-shaped, having numerous solid discs mounted on an insulative axis, end-braced, and buried. Their power was rated in terms of disc diameter and telegraph line distance: one foot diameter discs for seventy-five miles of line, two foot discs for up to four hundred and forty miles of line.

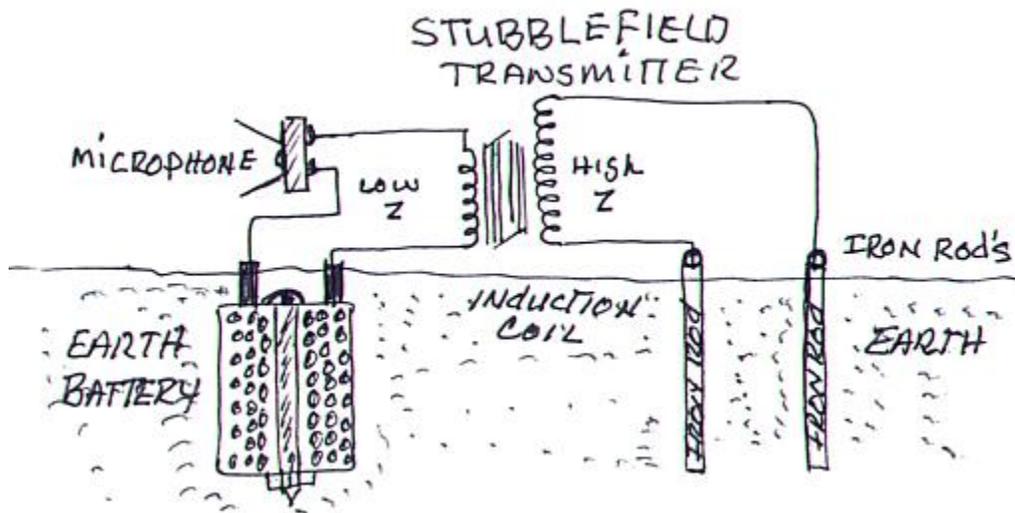


Composite earth battery



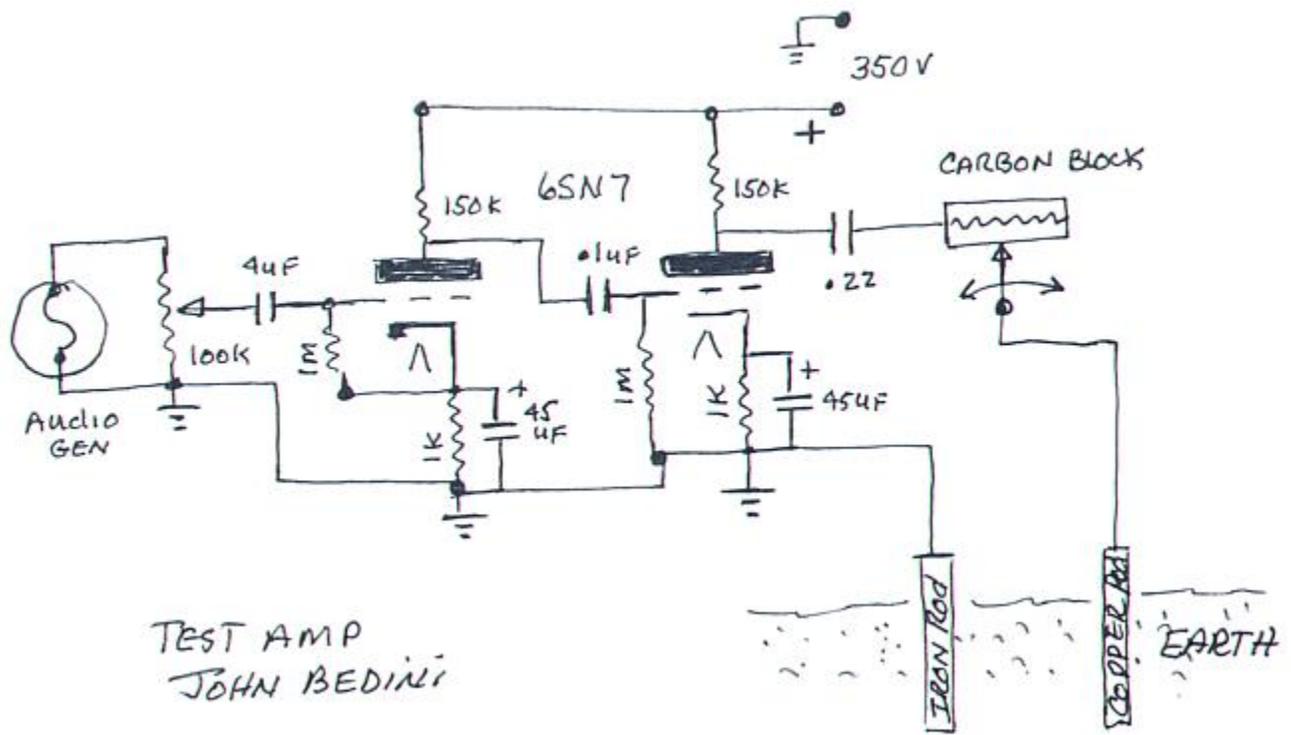
Experimental modulated earth battery

The experiment is to modulate the earth current. It works just like a modulated current source in a solid state amplifier, only this battery supplies the current. An example would be a strain gauge circuit.

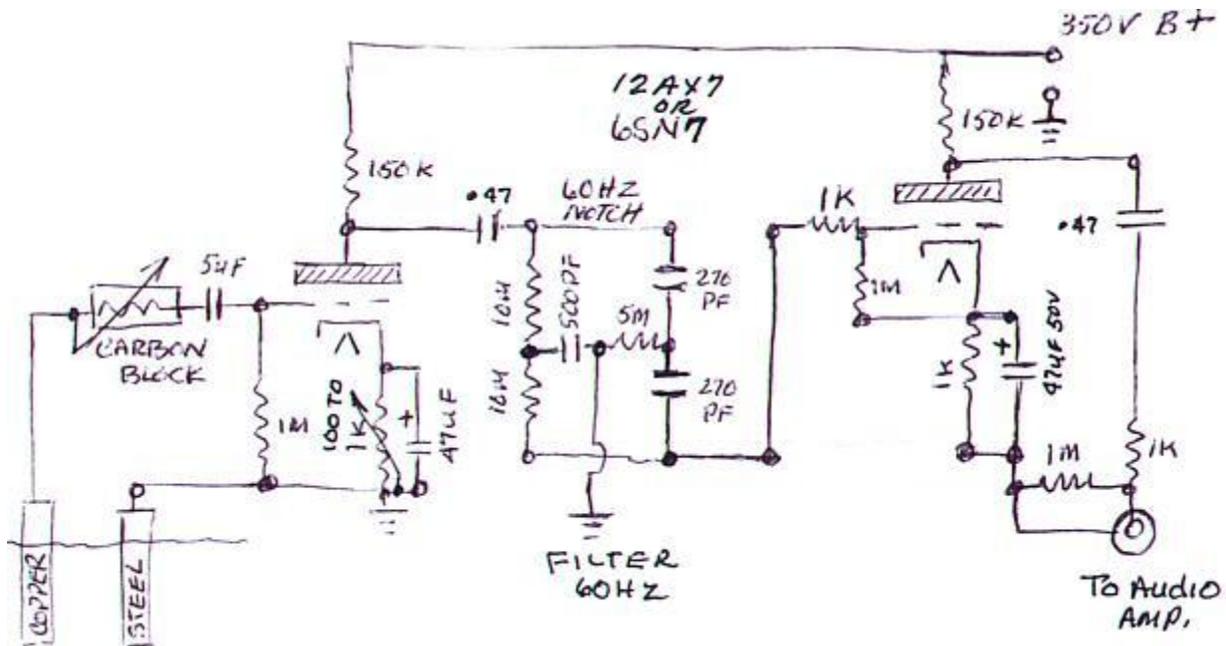


This mystery persisted for years. I have talked to some older engineers who report that local telegraph stations remained in operation despite the fact that their batteries had not been recharged for a great number of years. When the battery was examined it was actually dried out and physically corroded. Yet the signals continued.

In devices called "radionic" tuners by those who developed them, numerous investigations revealed the potentials of ground energy for social use. Agricultural applications of radionic tuners produced greater crop yields. Moreover, large ground-connected radionic tuners produced extraordinary effects on the mind and emotions.... relieving tensions and opening thought to new potentials. From this viewpoint, telegraph systems behaved as radionic tuners on a vast scale. We would therefore expect them to produce anomalous energetic effects in several parameters of human experience.



Test amplifier to transmit low power signals into the ground



In my test of an "earth battery system using grounding rods", when transmitting audio frequencies the weeds grew wildly. The normal weeds were so big that it took a tractor to cut them down.... It was found that tubes work the best.

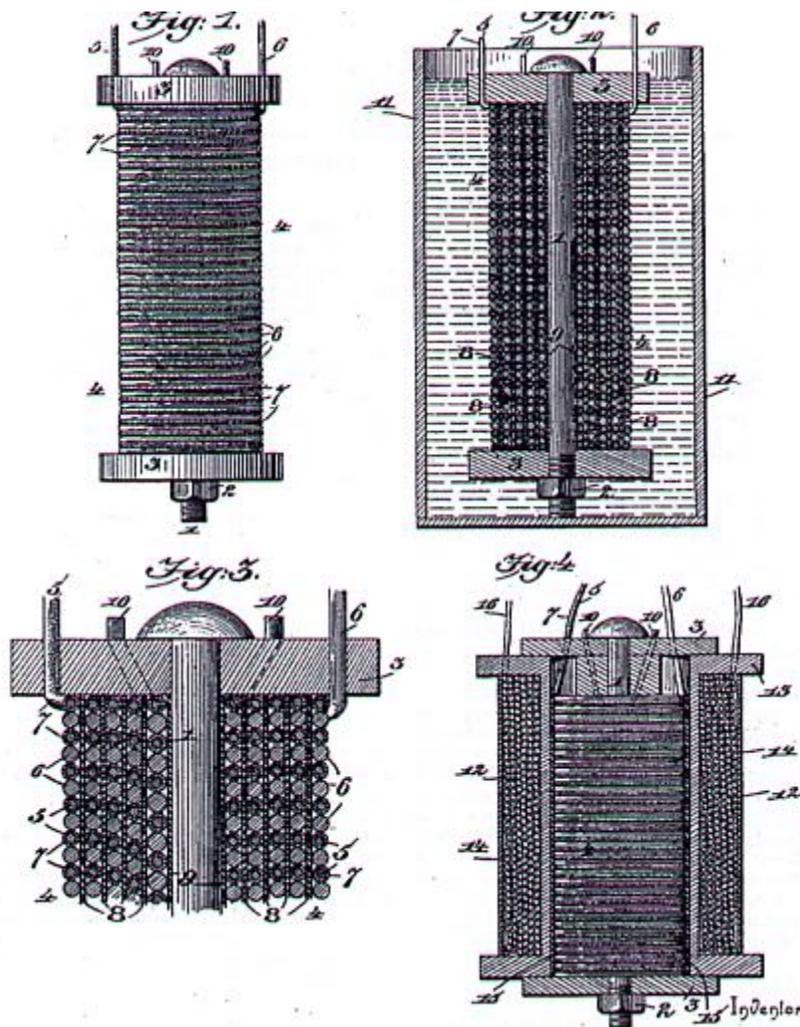
Let's try an experiment in earth energies.

Touching a well-grounded iron rod is a good first experiment to try in these regards. Try and find a place where power leakage into the ground is minimal..... such as in a park or wooded area. Take a yard-long solid iron rod whose surface is free of shellac or insulator coatings. Carefully drive the rod into the ground with a hammer. Wetted hands on the iron should

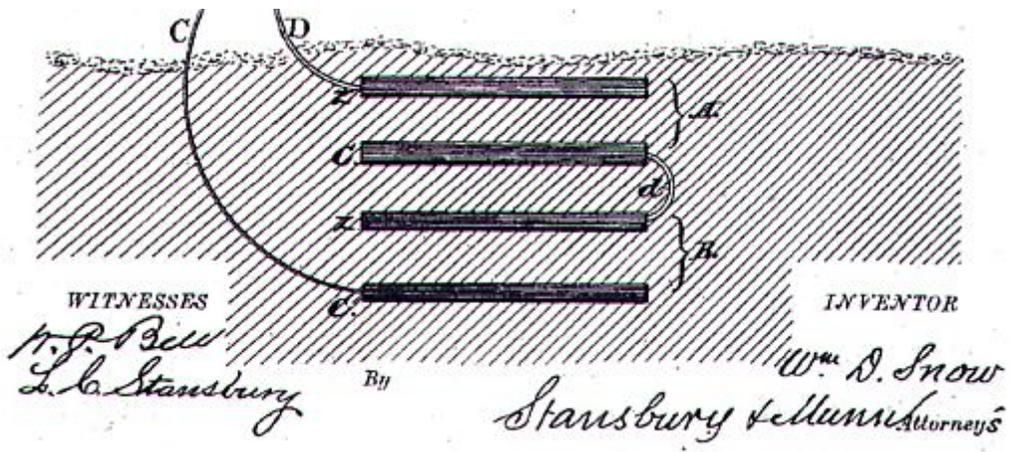
produce a mild electrical sensation. These voltages may be measured. They "pin" sensitive galvanometers. The current does not cease after several weeks of activity, when the rods are properly placed.

Most recognized that electricity was simply a by-product or epiphenomenon of a more fundamental agency which entered the grounded lines. Rheostats somehow "tuned" the potential of this earth energy. It was found possible to "match and tune" these energies through the use of rheostats and capacitors. (medical connection) Persons who were weak and infirm actually experienced vitalizing elevations when connected to the ground energy through these special rheostatic tuners.

Stubblefield Cell



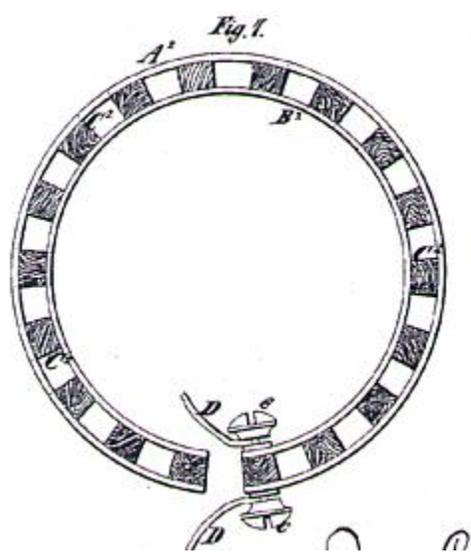
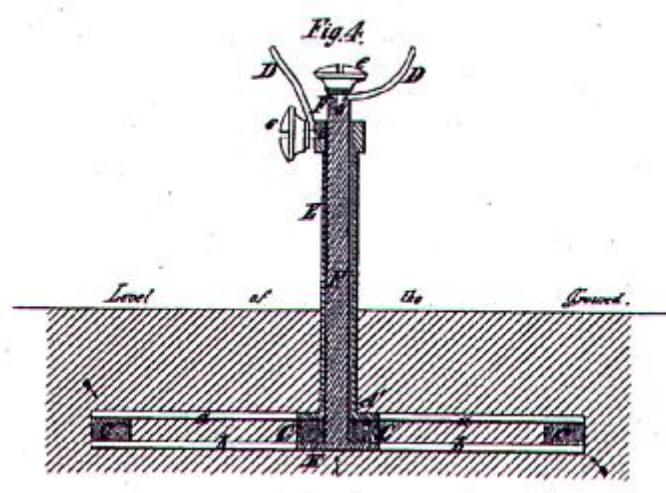
The Stubblefield Cell



William D .Snow Patent # 155,209

Improvement in earth batteries for generating electricity.

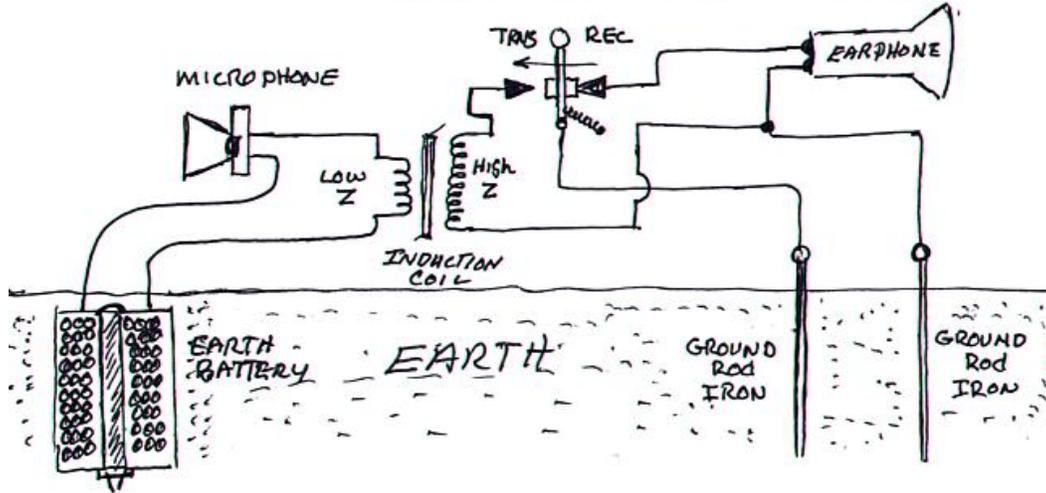
Z = Zinc C = Carbon



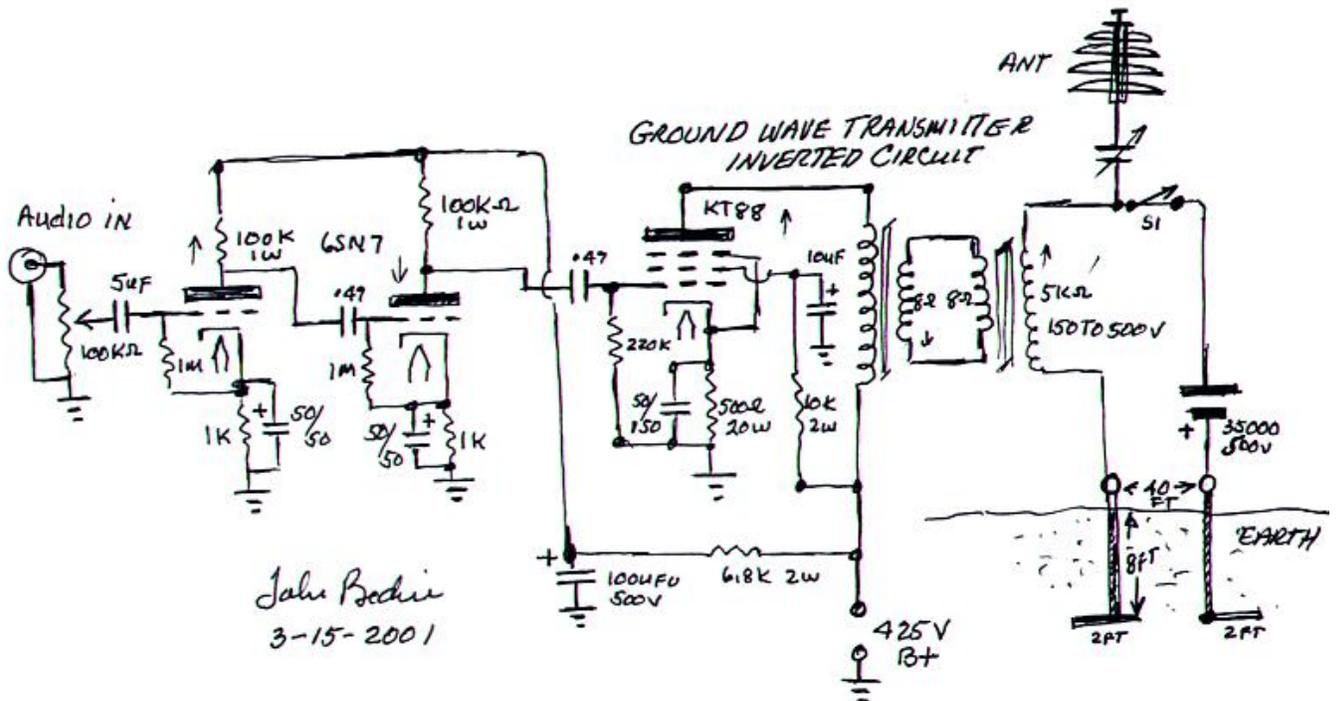
J. Cerpau. Patent # 182,802

Electric-Piles

STUBBLEFIELD PHONE SYSTEM

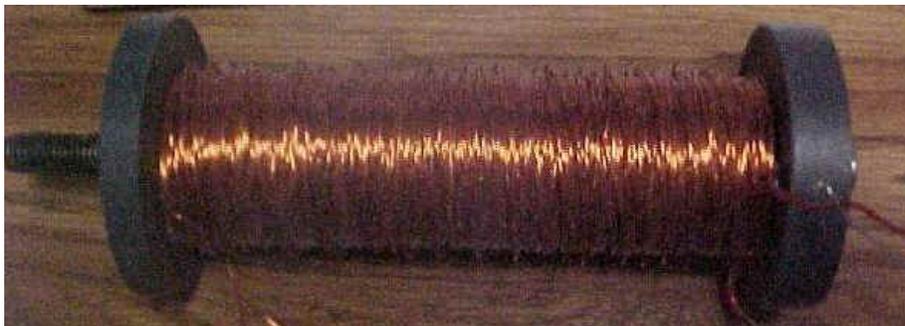


The transmitter below was used in my experiments. I used switching through a special antenna using large discs 10 inches in diameter insulated from the mast 30 feet above the earth .



We do not know the secret of the earth charge as Nathan Stubblefield determined it. Others since his time have observed fluctuations at certain times of the year in ground energy. It may be that a sudden induction is required before the excess ground charge surges to the surface..... like priming a pump.

So I did some experiments in building different types of cells. I used a 10 inch carriage bolt 3/4 inch diameter between two delron spacers. I used steel wire and copper wire that was coated. I would wind one layer and sand it off, check for shorts, and then wrap it with gauze and start the next winding. I then put the secondary induction coil windings on.



These are the results I got in a one gallon plastic jug filled with water. Volts .07, 250ma into dead short through meter shunt. I'm still working on a better cell to go into the ground at this time.

Stubblefield published an extraordinary brochure in 1898 to attract investors who had expressed interest in consolidating a small corporation around his work. In this brochure, Stubblefield insisted that power for his device was not generated in the cell. He calmly stated that the cell received its surplus energy from the earth. In a less discussed portion of the brochure, Stubblefield stated that "electrotherapeutic" devices had been developed from his earth battery. Other researchers made similar claims for their earth batteries (Hicks, Mellon). During this time, Stubblefield declared that news, weather, and other announcements could be broadcast through the ground across a great territory for private reception. He also added that simultaneous messages and news of all kinds would soon be transmitted through the ground from a central distribution station. (Shades of Tesla!)

In 1902 Stubblefield set up one of his sets in a "Mainstreet" upper office... in a hardware shop. From that point to his farm (some 6000 feet distant) he conducted continuous conversations with his son Bernard. Tapping with a pencil on his one-piece transceiver, Bernard was quickly heard in a loud, very clear voice. This transceiver was a carbon button placed in a tin snuff box. Speech and response were transacted through the same device, which acted as both microphone and loudspeaker. Cells (EARTH BATTERIES) were placed downstairs from the office in the ground. They were never removed and never wore out, though operating twenty-four hours a day around the clock.

Nathan Stubblefield offered to construct a large scale power station for the town of Murray. His quoted initial installation costs were estimated at five thousand dollars. The town politicians declined the offer. As a result, the technique of drawing up electricity from the earth remains a mystery.

The Stubblefield ground radio system was demonstrated for approximately one thousand Murray residents. Photographs of Stubblefield and his family, and a good crowd of witnesses from town, show the cell laying on the ground among all his assembled inventions; and a flower-pot sized coil of good volume. Other devices show motors and large capacitor stacks for aerial voice transmission experiments.

Stubblefield declares it to be an "energy receiver....a receptive cell for intercepting electrical ground waves". Its conductive ability somehow absorbs and directs the enormous volumes of earth energy.



Whether the current derived from this cell is electricity as we know it has been questioned. One indicator is not found when considering his use of the energy in lighting lamps. With this energy Nathan Stubblefield operated a score of arc lamps at full brightness for twenty-four hours a day. There was a definite trigger by which this energy was stimulated and maintained.

The induction coil which bears his name is equipped with three coils which are wrapped around and upon a heavy iron core. Bare iron wire and cotton-covered copper wire are wrapped side by side, comprising a primary coil body. Each layer of the primary coil body is covered by a band of cotton insulation, bringing four wire leads to the coil terminus. Two leads of iron and two of copper are external to the coil. Commercial electrical power is obtained through these connective terminals.

In addition to this bimetallic winding, there is a third winding: the "secondary". This third coil is insulated from the primary bimetallic coil, serving as a trigger device. Presumably, a stimulating impulse shock was introduced into the tertiary coil, after which the upwelling electrical ground response brought forth powerful currents in both iron and copper coils.

Electrolytically (as a battery in acid or saltwater) the Stubblefield coil is disappointing, producing less than one volt according to those who have duplicated its construction. Stubblefield's bimetallic coil was a "plug": a receiver which intercepts the vast and free electrical reservoir of the ground itself. His patent and subsequent company brochures define the manner in which his earth battery was to be activated.

Technically, the Stubblefield device is a modified thermocouple (a bimetal in tight surface contact) but a thermocouple could not supply the degree of power which he reported. While this arrangement could develop a few milliwatts of power in appropriately hot ground spots, the thermoelectric explanation of the device cannot explain the phenomenal output reported in the news reports of Stubblefield's demonstrations.

Furthermore, though the Stubblefield power receiver is wound like an induction coil, it produces a steady direct current output. This poses additional problems for the conventional engineer. Electrical induction only occurs with electrical alternations, oscillations, and impulses.



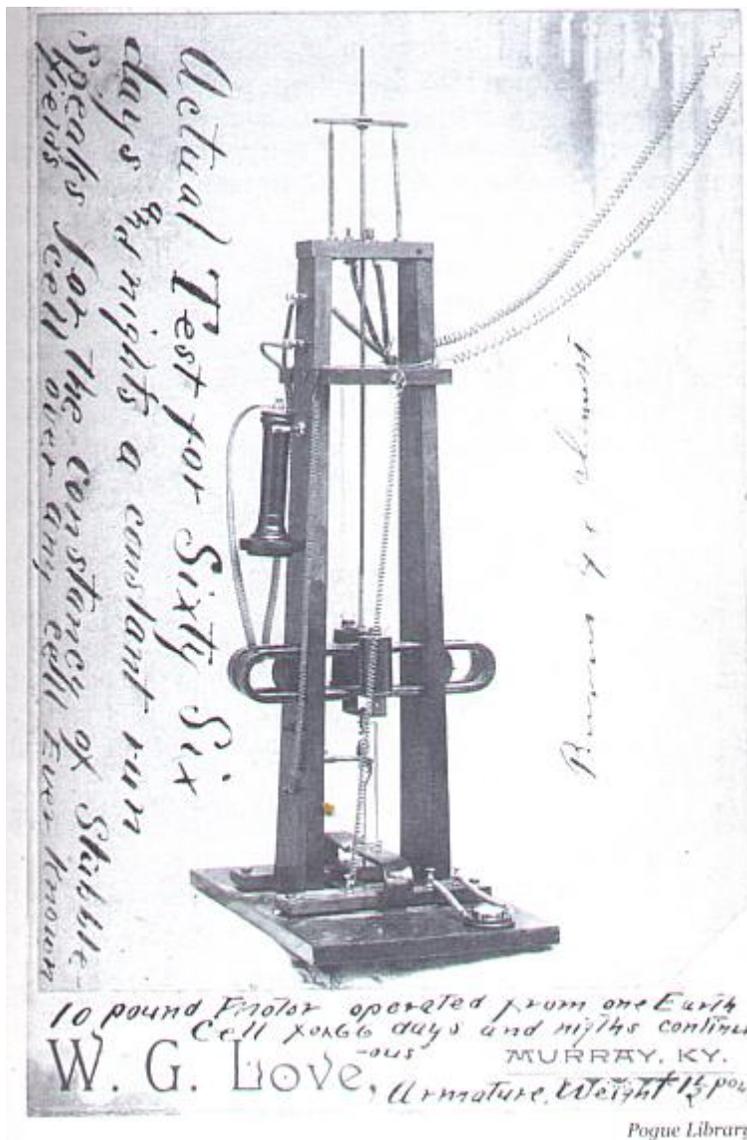
Nathan and Bernard Stubblefield, with wireless telephone

January 1, 1902

Witnesses describe ground-powered motors which ran unceasingly and unattended for months without need for replacing or replenishing the ground battery. Small machinery, clocks, and loud gongs were run by other ground-buried cells as reported by credible witnesses.

Stubblefield may have discovered the auto-magnifying voltage effect of electrostatic induction in coils before Tesla, who later utilized the effect in his special electrostatic Transformers.

These buried coils may have become saturated with earth electrostatic energy, which travelled from subterranean depths. In such a case, the mere battery power of the coil was replaced by the electrostatic flow, the coil acting as an electrode. This seems obvious when considering the fact that its ordinary battery current (1 watt) was gradually replaced by continually growing electrical current of far greater proportion.



Electric Motor that Stubblefield operated non-stop for 66 days with one Earth Cell battery. There is no explanation for the telephone receiver.

Is this the first induction pulse motor?

Observations made at Pittsburgh, Pa., communicated by E.W. CULGAN, Telegraph manager.

During Aug. 28th the intensity of the current evolved from it varied very much, being at times no stronger than an ordinary battery, and then suddenly changing the poles of the magnets it would sweep through them, charging them to their utmost capacity, and compelling a cessation of work while it continued.

On the morning of Sept. 2d, at my request the Philadelphia operator detached his battery, mine being already off. We then worked with each other at intervals as long as the auroral current continued, which varied from thirty to ninety seconds. During these working intervals we exchanged messages with much satisfaction, and we worked more steadily when the batteries were off than when they were attached.

On the night of Aug. 28th the batteries were attached, and on breaking the circuit there were seen not only sparks (that do not appear in the normal condition of a working line) but at intervals regular streams of fire, which, had they been permitted to last more than an instant, would certainly have fused the platinum points of the key, and the helices became so hot that the hand could not be kept on them. These effects could not have produced by the batteries.

In 1876, the American Alexander Graham Bell succeeded in developing a practical telephone. The first telephones functioned so that a telephone receiver was installed at both ends of a wire. The earth functioned as the return wire. Batteries were not necessary because the telephone receiver's permanent magnet produced an electrical current in the coil when a magnetically conductive membrane was activated by speech. Finland's first telephone connection was built during December of 1877 in Helsinki.