

My invention relates to improvements in ELECTRICAL POWER ACCUMULATORS and the like, wherein the earth acting as rotar and the surrounding air as a stator, collects the energy thus generated by the earth rotating on its axis, utilizes the same for power and other purposes.

In the development of my WIRELESS TRAIN CONTROL SYSTEM for railways, covered by my United States Letters Patent Number 843,550, I discovered that with an antennae consisting of one wire of suitable diameter supported by insulating means three to six inches above the ground and extending one half mile, more or less in length, the said antennae being grounded at one end through a spark gap and energized at the other end by a high frequency generator of 500 watts input and having a secondary frequency of 500,000 would produce in said antennae oscillatory frequency the same as that of the earth currents and thus electrical power from the surrounding media was accumulated along the length of the transmission antennae and with a closed oscillatory loop antennae 18 feet in length run parallel with the transmission antennae at a distance of approximately 20 feet it was possible to obtain by tuning the loop antennae, sufficient power to light to full candle power a series bank of 50 sixty watt carbon lamps. Lowering or raising the frequency of 500,000 resulted in diminishing the amount of power received on the 18 foot antennae/ Like-wise the raising of the transmission antennae resulted in a proportionate decrease of power picked up on the receiving antennae and at 6 feet above the earth now power what-ever was obtainable without a change of potential and frequency.

It is the objective of my generic invention to utilize the power generated by the earth by means herein described and illustrated in the drawings. The two figures in the drawings illustrate simple and preferred forms of this invention, but I wish it understood that no limitation is necessarily made as to the exact and precise circuits, shapes, positions, and structural details therein shown, exhibited and herein described in combination or otherwise and that changes, alterations and modifications may be made when desired within the scope of my invention and as specifically pointed out in the claims.

Referring particularly to Figure 1; 1 and 2 are alternating current feed wires supplying 110 volts 60 cycles to a high frequency generator. 3 is a switch with 4 and 5 poles of same 6 and 7 are connections of high frequency transformer 8 for stepping up the frequency to 500,000 and the voltage to say 100,000, 9 is an inductance coil 10 is the spark gap and 11 is the adjustable condenser while 12 is the primary winding of transformer 8 and 13 is the secondary winding of transformer 8. Secondary winding 8 goes to ground through lead wire 15 to adjustable condenser 16 and lead wire 17, and 18. 14 is lead wire from other side of secondary winding of transformer 8 to main transmission antennae 19 supported by insulating means 20. 21 is spark gap from transmission antennae 19 to ground through lead wire 22 adjustable condenser 23, lead wire 24 to ground 24'. Transmission antennae 19 may be of any desired length desired.

In Figure 2;- 25 is a closed oscillating loop antennae of any desired length and for greatest efficiency is run parallel with transmission antennae 19 of Figure 1, 26 is lead to step down transformer 27 of which 27' is the secondary 28 is lead

to adjustable condenser 29, lead 30 to ground 31. 32 is primary winding of transformer 27, 33 is adjustable condenser and 34 and 35 are windings of frequency transformers supplying current through leads 36 and 37 to motor \times 38, or other power devices.

Having described the drawings will now describe the operation of my invention. Throw switch 3 connecting feed wires 1 and 2 with transformer leads 6 and 7, adjust spark gap 10 and condenser 11 so that a frequency of 500.000 and 100.000 volts is delivered from secondary leads 14 and 15 of step up transformer 8 of Figure 1. Next adjust spark gap 21 of transmission antennae 14 so that all nodes and peaks are eliminated in the transmission of the 100.000 volts and 500.000 frequency along said antennae 14, by the surges occurring pass over the gap 21 to lead 22 to adjustable condenser 23 to lead 24 to ground 24' thence the high frequency current of 500.000 passes in return through ground to ground 18 thence up lead 17 to adjustable condenser 16 to lead 15 to secondary winding 13 of transformer 8. The oscillatory current of 100.000 and frequency of 500.000 being of the same frequency as the earth generated currents and thus in tune with same it naturally follows that accumulation of the earth currents will assimilate with the same tuned currents and frequency with those of the output from transformer 8 along wires 14 affording a reservoir of high frequency currents to be drawn upon by a tuned circuit having the same characteristics of 500.000 frequency capacity which is shown in Figure 2; the antennae 25 is tuned fundamentally to receive a frequency of 500.000 which current passes to lead 26 through winding 27' of transformer 27 thence to lead wire 28 through adjustable condenser 29 to lead wire 30 to ground 31

the high frequency currents of 500,000 and voltage of 100,000 passes through to winding 32 and by adjustable condenser 33 and windings 34 and 35 of the frequency transformer 27 is stepped down to a voltage and frequency suitable to operate motor 38 receiving current from leads 36 and 37 this makes available a current supply for any purpose what ever, such as operation of areoplanes, automobiles, railway trains and current for industrial plants, lighting, heating and etc.,

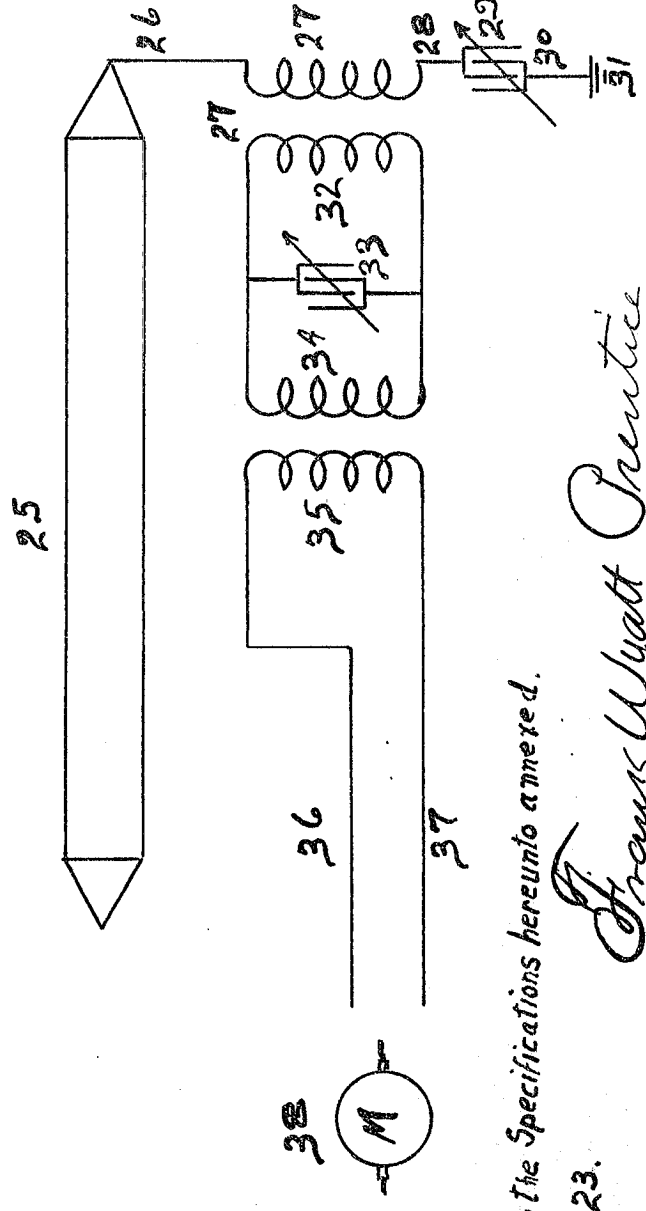
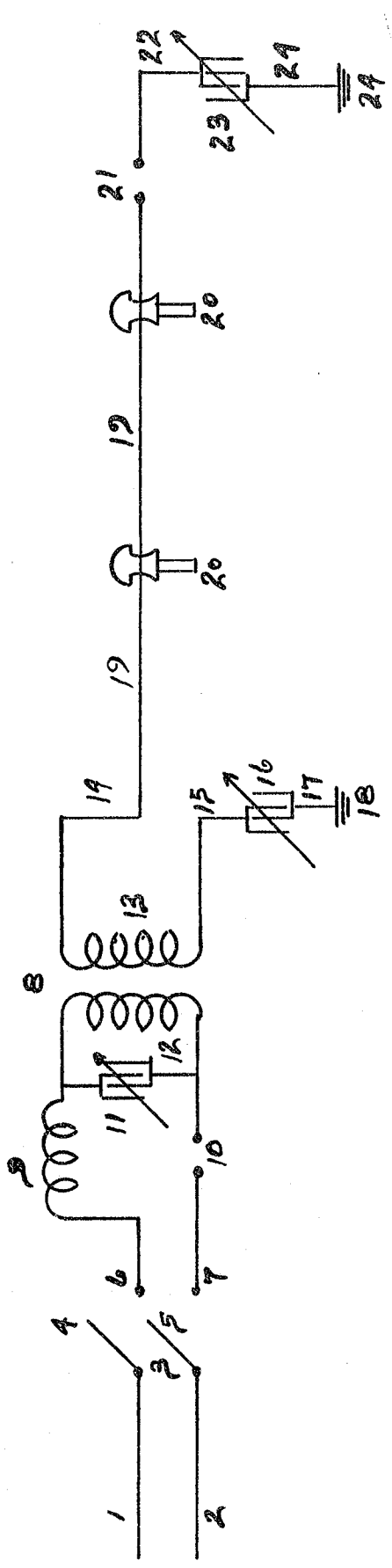
The return of current through the earth from transmission antennae 14 is preferable to a metallic return as a higher percentage of accumulation of earth currents is noticeable on receiving antennae of Figure 2 than from a metallic return accountable for because of the condenser effect the grounded circuit affords. I also prefer under certain conditions to use a single antennae receiving wire in place of the closed loop shown in Figure 2. Under certain operation requirements I have found it expedient to have the transmission antennae elevated and carried on poles many feet above the earth and in that case a different voltage and frequency was necessary to accumulate earth currents along the transmission antennae 14.

What I claim is:-

1. In an Electrical Power Accumulator, a synchronized oscillatory circuit parallel with and in proximity to earth adapted to accumulate and utilize current generated by the earth.
2. In an Electrical Power Accumulator, a synchronized oscillatory circuit having same frequency as the earth generated currents, said circuit parallel with and ⁱⁿproximity to the earth, said circuit adapted to accumulate and utilize current generated by the earth rotating on its axis.
3. In an Electrical Power Accumulator, a high frequency oscillatory generator grounded on one side with a connected antennae grounded at further end through a spark gap said antennae adapted to oscillate and radiate earth accumulated currents.
4. In an Electrical Power Accumulator, a high frequency oscillatory generator grounded on one side with a connected antennae grounded at further end through a spark gap said antennae adapted to oscillate and radiate earth accumulated currents and receiving means adapted to utilize said radiated earth accumulated currents said means synchronized to pick up and utilize said radiated earth currents.
5. In an Electrical Power Accumulator, a synchronized oscillatory circuit parallel with and in proximity to earth adapted to accumulate and utilize current generated by the earth using synchronized means to pick up at a distance therefrom said radiated earth currents.

6, In an Electrical Power Accumulator, a synchronized oscillatory circuit having same frequency as the earth generated currents, said oscillatory circuit parallel with and in proximity to the earth, said oscillatory circuit adapted to accumulate and radiate current generated by the earth totating on its axis and means adapted to utilize said synchronized accumulated earth currents, picked up at a distance from said oscillatory radiating circuit.

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Certified to be the Drawings referred to in the Specifications herewith annexed.
 Meadville, Penna, Sept. 18, 1923.

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