# Oliver Heaviside Discovered a Practical Substitute for Super-Conductance at Room Temperature in 1876 when he Correctly Modeled the Electrodynamic Behavior of a Transmission Line <sup>1 2</sup>

# It's High Time we Give Him Credit for this Discovery and for Making it Possible to Construct a Direct Current Transformer

1	13 <sup>th</sup> of August, 2022 – `	Vinyasi
	<b>──</b> ◇ <b>─</b>	

#### **Abstract**

A magnetic sink, when wrapped around magnetic wire prior to winding coils, preserves the magnetic field of the wire to such a degree of efficiency that the transmission of power across the wire can be sustained for any length regardless of the wire's resistance.

This has already been proven by the 1800's solution to the trans-Atlantic telegraph cable problem in which an insulated copper cable was insufficient to transmit data across the Atlantic Ocean. It took Oliver Heaviside to mathematically model the problem so that a solution could be found.

It has also been implemented in Nathan Stubblefield's patented "Earth Battery", U.S. Patent number 600,457 dated the 8<sup>th</sup> of March, 1898.

This is an exercise in critical thinking concerning the Heaviside solution and how it is applicable to transformer design to mitigate the resistance of its coils. I am satisfied that I finally can say that I understand its significance by stumbling across falling dominoes videos on YouTube. Nikola Tesla demonstrated that there is a mechanical analog for every electrical circuit which also helps us to understand what we cannot see.

I have updated this presentation to reflect this insight.

## Keywords

overunity, free energy, electrical engineering, Oliver Heaviside, Edward Leedskalnin, Nathan Stubblefield, Mitko Gorgiev, Nikola Tesla, mechanical analog, falling dominoes, falling dominos, perpetual motion holder.

#### Introduction

Current is a local phenomenon of a transitory change in voltage over time. In contrast, voltage is neither limited to any locality, nor is it necessarily a transitory phenomenon. The transitory, short-range of the magnetic field surrounding the conduction of current is costly to maintain by mere voltage without the assistance of a ferromagnetizable layer surrounding a copper: coil or a transmission line. With this protection, a reduced loss of energy remains due to mere resistance but without any distortion

<sup>1</sup> Oliver Heaviside's solution to the trans-Atlantic telegraph cable problem of the 1800s - Brave Search

<sup>2 &</sup>lt;u>Transatlantic telegraph cable, Communication speeds – Wikipedia</u>

of its signal. But without any protection, there is an additional distortion and with a greater loss of energy. So, this protection provides for a reduced loss of energy due to the elimination of signal distortion. And we can take advantage of this reduction of energetic loss since the combination of inductive and capacitive reactance can generate reactive power when they occur, simultaneously, [§] and avoid the limitations of long-distance transmission by satisfying all of our energetic needs onsite. <sup>3</sup>

#### **Discussion**

Mitko Gorgiev<sup>4</sup> is hot on a significant trail when he shares with us his suggestion that current can pass through an open circuit! It turns out that this is an important concept which has been forgotten since its inception back in the days of Oliver Heaviside and Nathan Stubblefield.

The idea that current can flow in an open circuit if provided a conductor to sink itself into is reflected in Oliver's idea that iron wrapped around an insulated copper cable (and not electrically connected to the cable; but merely surrounding it) <sup>5 6</sup> will be sufficient to conserve against magnetic loss and preserve the transmission of power over any distance, because the magnetism will have something to sink itself into, namely: a ferromagnetizable substance, utilizing the principle of magnetic remanence <sup>7</sup> (prevalent within computer core memories constructed between 1955 and 1975). Edward Leedskalnin <sup>8</sup> popularized this concept in the 1930s when he talked about it in his various books on the subject. He called it, his: Perpetual Motion Holder <sup>9 10</sup> since the remanence never goes away unless counter-acted (which fulfills Newton's First Law of Motion: "A body remains in the state of rest or uniform motion in a straight line unless and until an external force acts on it"). <sup>11</sup> Nathan utilized this design criteria in his Earth Battery. <sup>12</sup>

That's not the case with our exclusive use of copper (when constructing magnetic wire) which merely conducts voltage while costing us its magnetism due to the resistance and the length of the wire.

This notion of Oliver is key to unhinging the common sense of today that a non-pulsed <u>DC</u> transformer is "ideal", yet not buildable. <sup>13</sup> How wrong we are! This "standard" notion is predicated upon the standard method of constructing transformers devoid of an iron wrapping surrounding the wire of their coils.

In order for DC to pass across a transformer, it is necessary to sustain the magnetic field throughout the entire period (in between the two half-cycle inversions of polarity) in which current is traveling in one direction making it a DC transmission per half-cycle. Standard transformers do not possess the safeguard exemplified by Oliver and instigated by Nathan against magnetic leakage. So, the only asset to a transformer's ability to transfer electricity is a transient initiated by polarity inversion twice each cycle and a frequency sufficient to shorten the duration of loss in between each of these inversions, or else a pulsed DC Transformer initiating a periodic voltage surge within older automobiles. <sup>14</sup> That's it.

But an iron wrapping surrounding each coil of a transformer sustains magnetism throughout the

<sup>3</sup> Jim Phipps answer to: How far is it practical to transmit electric power over power lines? (Quora)

<sup>4 &</sup>lt;u>Mitko Gorgiev's post: Regarding my previous post about the electroscope,...</u>

<sup>5</sup> Loading coil, Oliver Heaviside – Wikipedia

<sup>6</sup> Loading coil, Krarup cable – Wikipedia

<sup>7</sup> magnetic remanence - Brave Search

<sup>8</sup> Edward Leedskalnin - Brave Search

<sup>9</sup> Edward Leedskalnin Perpetual Motion Holder - Brave Search

<sup>10</sup> Mathematical Model of Edward Leedskalnin's Perpetual Motion Holder (hilarispublisher.com)

<sup>11</sup> Newton's First Law of Motion - Brave Search

<sup>12</sup> U.S. Patent #600,457; Mar 8, 1898; Nathan Stubblefield – (storage.googleapis.com)

<sup>13</sup> Transformer w/ DC (falstad.com)

<sup>14 &</sup>quot;...generated by the voltage regulators in some automobiles, e.g., the classic air-cooled Volkswagen Beetle." – Wikipedia

entire duration of each cycle. This conservation against loss due to distortion makes it much easier to achieve overunity in a circuit since the energy entering into this type of circuit does not, and cannot, equal its resulting reactance if we begin to construct magnetic wire this way, for it would cause an accidental revolution! People would be stumbling upon all sorts of novel ways of producing overunity.

If magnetic tape (from old VHS, audio, etc) were to be wound around copper magnetic wire as a make-shift do-it-yourself substitution for getting a more professional version, then an additional layer of insulation would have to be placed upon the iron winding to prevent the eddy currents (induced within the iron winding) from redirecting the magnetic flow in a manner similar to a short-circuit, because it would reshape the magnetism of the coil.

"The 1928 Newfoundland-Azores High-Speed Duplex Cable was apparently the first to use permalloy like loading." <sup>15</sup>

[§ Footnote §] – Phase separation <sup>16</sup> of electricity occurs whenever the electromotive force and the magnetomotive force are in diametric opposition to each other with a maximum angular separation of 180° between them (in time) per cycle of oscillations. The result is analogous to a non-Newtonian sheer thinning fluid. <sup>17</sup> Under these conditions, negative resistance occurs in which power is not consumed; it is produced. <sup>18</sup> But because each of these two forces are at their respectively negative or positive 90° displacement from a unity power factor, indicating a simultaneous maximum of both a lagging and a leading current, the power which is produced is reactive, only. And since several methods of conversion from reactive power to real power exists, none of this production of reactive power is useless. On the contrary, it is the only way (that I know of) in which "free energy" can exist <sup>19</sup> and be explained by electrical science <sup>20</sup> – thermodynamics, notwithstanding, since it fails to define this phenomenon. <sup>21</sup>

<sup>15</sup> Roy McCammon's answer: Where is Lenz Law in Heaviside's solution to trans-Atlantic telegraph [signal] distortion?

<sup>16</sup> Phase separation - Wikipedia

<sup>17</sup> Non-Newtonian, Sheer thinning fluid - Wikipedia

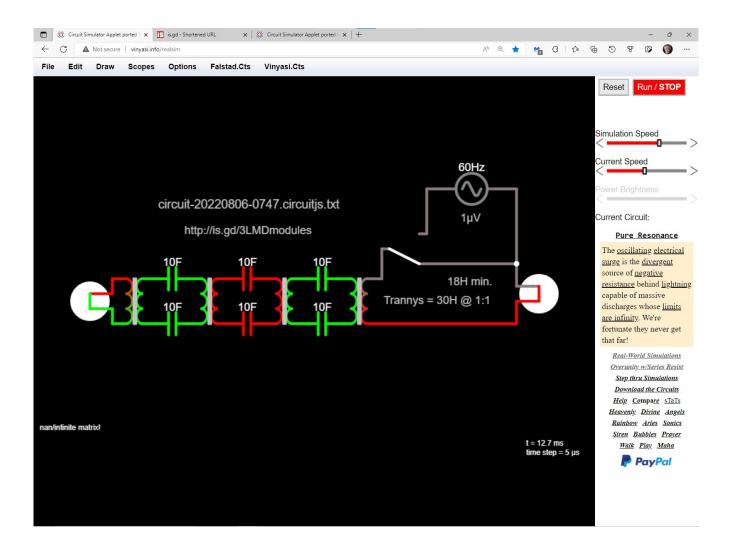
<sup>18</sup> Negative resistance - Wikipedia

<sup>19 (</sup>PDF) Free Energy is a Self-fulfilling Proposition if a Specific Set of Conditions are Met, POST-PUBLICATION UPDATES. (researchgate.net)

<sup>20</sup> Electrical Science (quora.com)

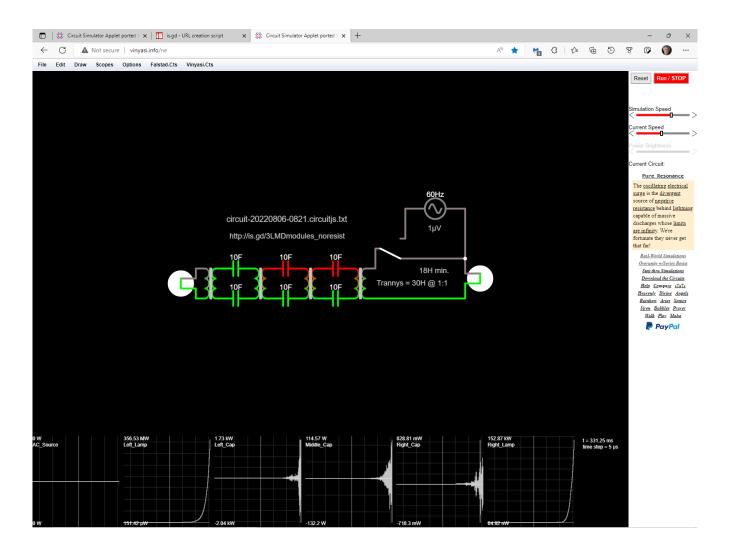
<sup>21</sup> Laws of thermodynamics - Wikipedia

The following example reaches infinite gain in zero time and possesses resistance (it took nearly 13 milliseconds for me to snap the switch after clicking the "Run/STOP" button, but the result was instantaneous). The coils of its transformers use 25 AWG wire so that their resistances are approximately the same as their inductances when their units of Ohms are compared with their units of Henrys. The capacitors possess an equivalent series resistance of 3 Ohms...



https://is.gd/3LMDmodules

Compare the following result which possesses no resistance. It takes a third of a second to merely light up the bulbs let alone much longer to reach the simulator's limit of "nan/Infinite matrix"...



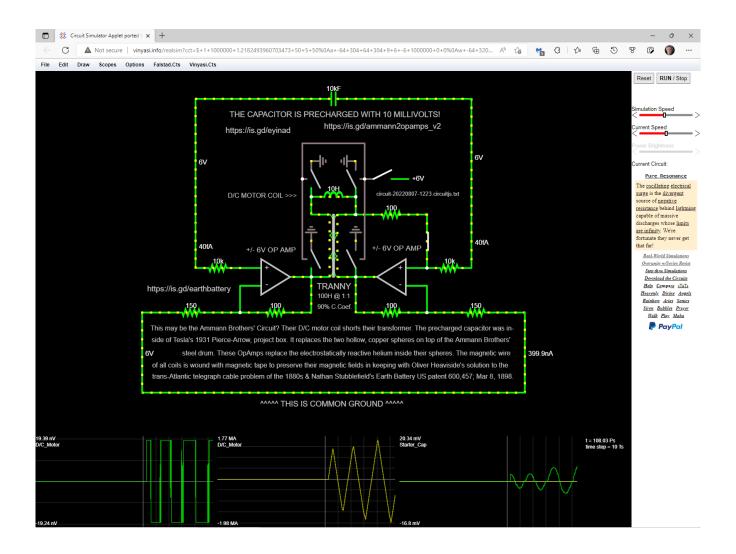
https://is.gd/3LMDmodules noresist

You'd think that resistance would take longer than no resistance to reach any appreciable gain. Yet, the opposite is the case!

This is why I have begun to say that impedance is our friend.

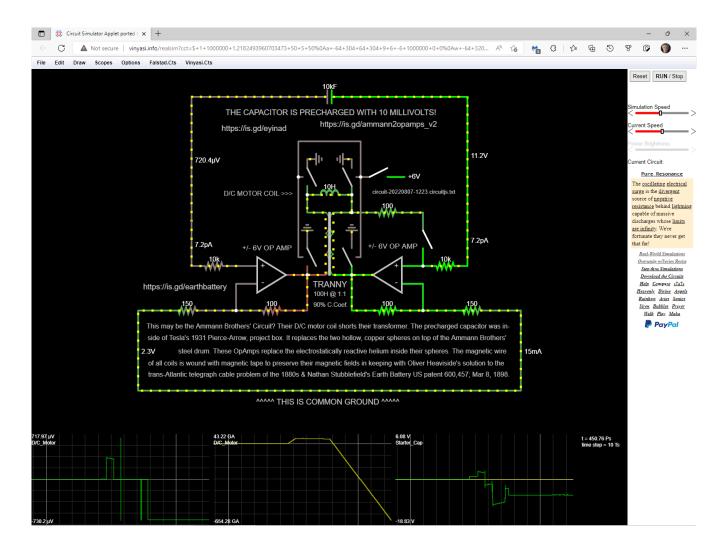
The transformer coils require a minimum amount of inductance in order to gain, rather than lose, energy over time. Likewise, the capacitors require a minimum amount of capacitance to achieve the same result. Thus, working together, their reactive and resistive impedances (which they deliver) achieves the goal of overunity when a specific supportive criteria is met, namely: wrapping all of the magnetic wire with something which is magnetizable – perhaps, magnetic tape, and turn a mediocre performance into something which sizzles!

Here is another example which may be more practical, i.e. regulatable – and possibly buildable as well...

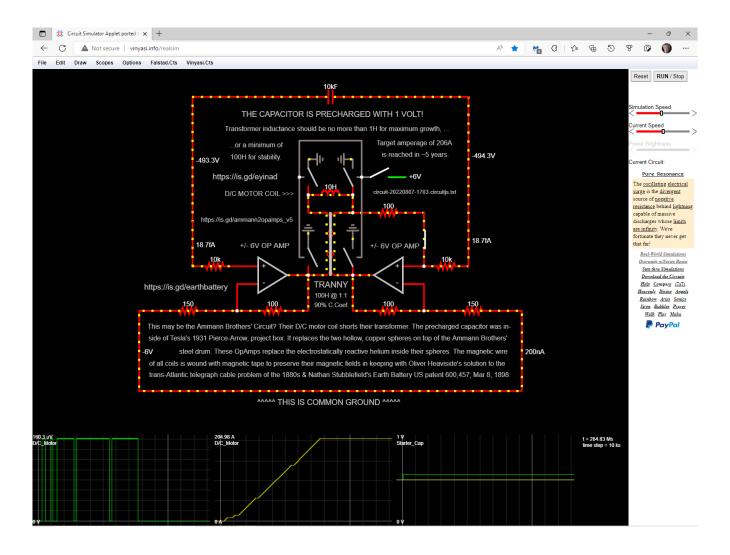


https://is.gd/ammann2opamps v2

It's motor coil possesses extremely little voltage while growing to an indeterminate limit of current if the right combination of closed versus open exists among the two switches in a specific sequence of their closure or opening...



Another combination of open versus closed among its pair of switches slows growth down to an almost perfect horizontal of severely reduced rate of growth to "semi-stabilize" the results of any previous "gain"...



https://is.gd/ammann2opamps v5

Since this is merely a representation of a speculated invention (by the Ammann brothers in 1921), <sup>22</sup> its translation into a physical build is interesting in that the op-amps are replaced with helium and the capacitor represents the one volt, initial difference between the two containers of helium, namely: two hollow copper spheres.

I chose  $\pm 6V$  for the op-amp inputs since 6V batteries were the norm powering the electrical systems of gasoline fueled cars back in the early days prior to the 1940s.

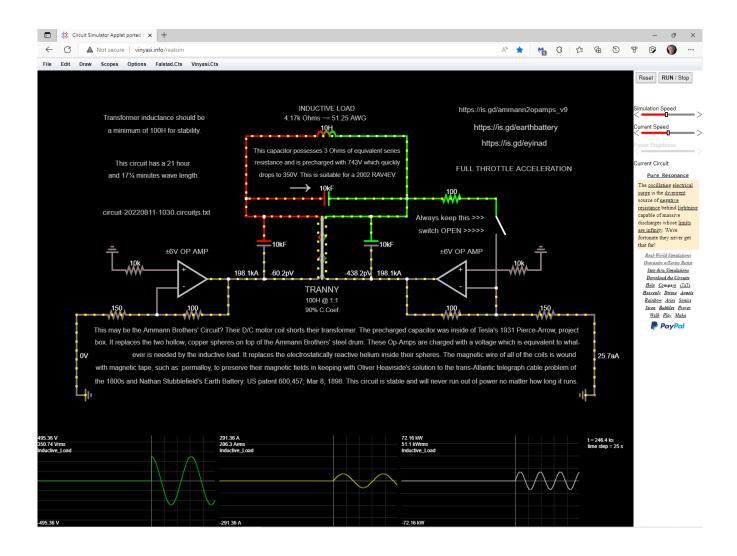
<sup>22</sup> Ammann Brothers, Newspaper Article.jpg (810×722) (vinyasi.info)

Here's another version which precharges a capacitor situated across the inductive load with a voltage which is slightly more than twice the target voltage – in other words, a precharged condition of 743V intended for a target voltage of 350V which is fed to the motor controller of a 2002 RAV4EV.

The only reason why I drastically raise the precharged voltage in the following example is to conform to the needs of a typical electric motor. Otherwise, I'd stick with one volt. But that produces a ridiculously low output of voltage (see examples, above) which is not suitable for modern-day motors.

So, I added capacitors across the motor and across both transformer coils to help alleviate this oddity.

Unfortunately, its wave-length is much longer than a standard motor and will have to be modified via pulse width modulation or some other technique to accommodate the slower rotation rate which an automobile drive-shaft can tolerate...

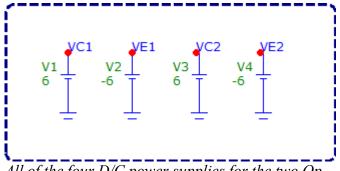


https://is.gd/ammann2opamps v9

In Micro-Cap analog simulator, <sup>23</sup> it gets interesting. <sup>24</sup> A similar performance can occur, but not without extra effort imposed upon the circuit via a much higher precharged voltage than the previous examples in Paul Falstad's simulator (black backgrounds) of one volt. But then, I am not taking advantage of mechanical switches to pump surges into the circuit in order to ratchet its power level, upwards, in incremental steps. Nor, am I making use of any other technique, such as: incandescent light bulbs, to enhance the outcome (such as I have done in the first example, up-above)...



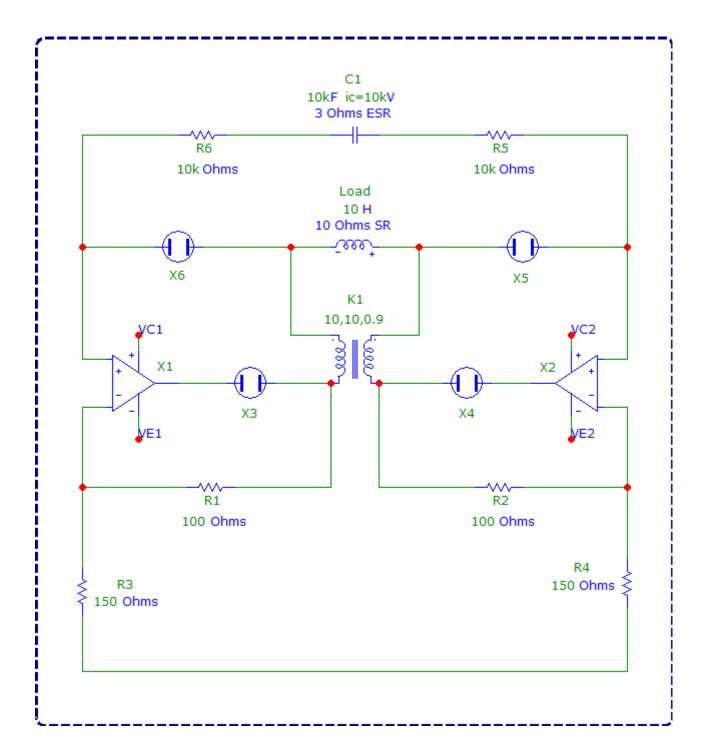
The voltage readout of all four spark gaps at their node number ten tells us whether or not they are arcing if they are at 10V or not arcing if they are at anything less than that, such as: at 10 nanovolts. These four readouts are: V(X3.10), V(X4.10), V(X5.10), and V(X6.10). The impedance of the inductive LOAD is traced with: RMS(V(LOAD))/RMS(I(LOAD)). Its watts is: RMS(V(LOAD))\*RMS(I(LOAD)).



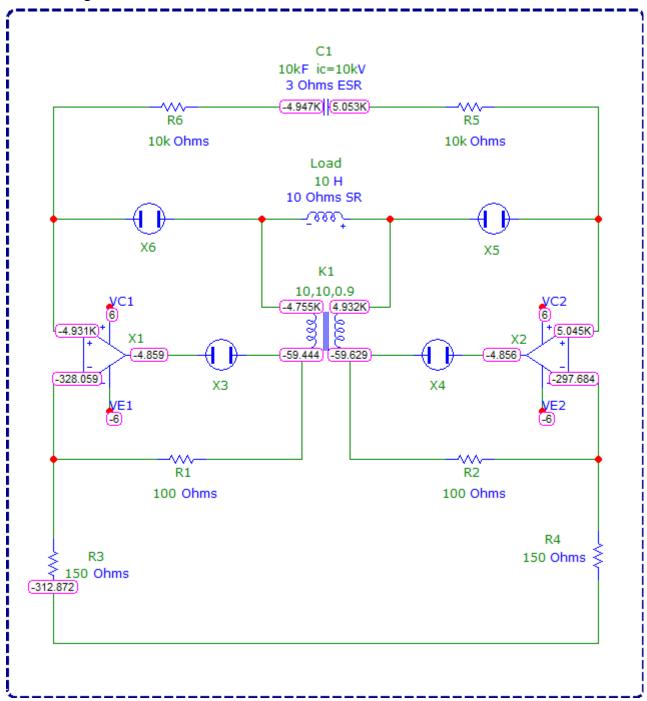
All of the four D/C power supplies for the two Op-Amps, X1 and X2, are at  $\pm 6V$ .

<sup>23</sup> Micro-Cap 12. Analog, mixed mode, & digital simulation software. SPICE & PSpice® compatible. (spectrum-soft.com)

<sup>24</sup> Upload files for free - ammann with two opamps and four neon bulb, spark gaps.cir - ufile.io



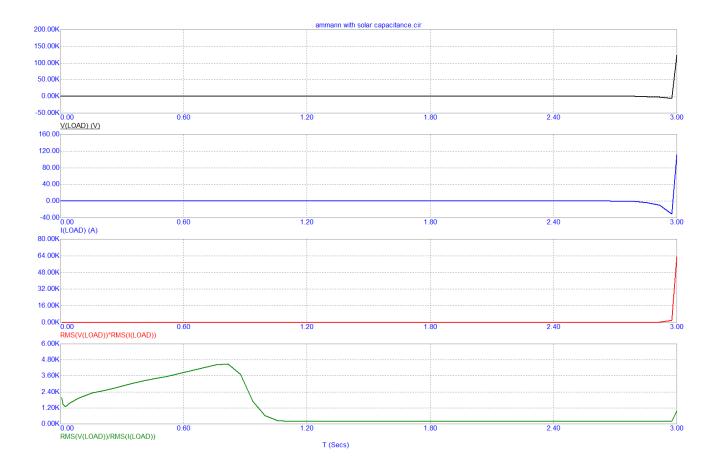
A 10 kilo Farad capacitor, C1, has an "initial condition" of being precharged with 10 kilovolts (ic=10kV). Transformer, K1, possesses 10 Henrys on each of its primary and secondary coils with a coupling coefficience of 90%.



**WARNING...**The reason why Micro-Cap requires so much voltage (on precharged capacitor, C1) is due to a presumption that no one will use a magnetizable steel bolt as their transformer core, nor extend the core material into a similar housing surrounding the coils, nor use any iron wrapping around all of the coils, including the LOAD. To be successful, *all ferromagnetic material must be suitable for a PMH experiment* <sup>25</sup> *which exhibits magnetic remanence when the voltage source is cutoff from energizing the coils*. Otherwise, only a continuous and enlarged voltage will succeed. This unwittingly sabotages "free energy research" by endorsing the use of composite materials for transformer cores.

<sup>25 &</sup>quot;Oh Nuts!" Magnetic Lock. Your Going To Like! Using The Principles Of Ed Leedskalnin PMH. Must Watch - YouTube

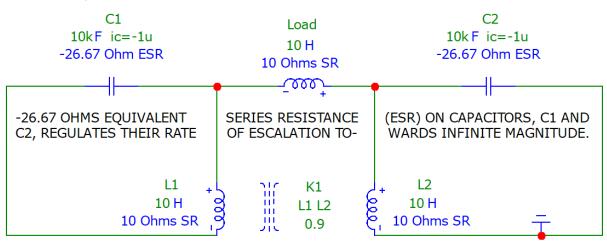
The following output <sup>26</sup> (of three seconds) is an exception to the **WARNING**, above, because it functions similar to our Sun or any other star which lacks sufficient load to prevent it from exploding...



<sup>26</sup> Upload files for free - ammann with solar capacitance.cir - ufile.io

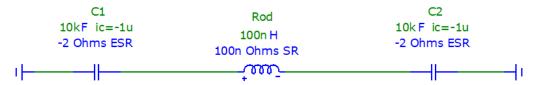
SOLAR CAPACITANCE = CAPACITANCE WITH NEGATIVE EQUIVALENT SERIES RESISTANCE. WHY? BECAUSE OUR SUN'S VISIBLE CORONA IS COMPOSED OF JUST TWO INGREDIENTS: NEON AND SILICON IN A STATE OF IONIZED PLASMA. IT TURNS OUT THAT NEON SUPPLIES THE NEGATIVE RESISTANCE WHILE SILICON SUPPLIES THE CAPACITANCE. THE AMMANN BROTHERS PROBABLY HAD A NOBLE GAS, SUCH AS: NEON OR ARGON OR HELIUM, INSIDE OF THEIR 2 HOLLOW COPPER SPHERES PLUS A SMALL AMOUNT OF VERY FINELY GROUND QUARTZ SILICA. THIS COMBINATION OF INGREDIENTS SUPPLIED ITS POWER. EVERYTHING ELSE WAS MERELY BALLAST. CAPACITORS, C1 AND C2, ARE THESE TWO COPPER SPHERES.

CAPACITORS, C1 AND C2, ARE INITIALIZED (PRECHARGED: IC) WITH 1µV DERIVED FROM THE AMBIENT ENVIRONMENT AT GROUND LEVEL.

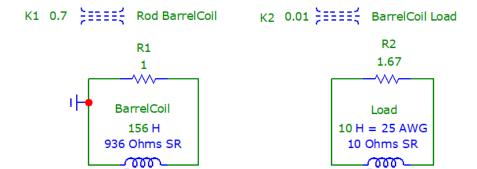


SOLAR CAPACITANCE = CAPACITANCE WITH NEGATIVE EQUIVALENT SERIES RESISTANCE. WHY? BECAUSE OUR SUN'S VISIBLE CORONA IS COMPOSED OF JUST TWO INGREDIENTS: NEON AND SILICON
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WHILE SILICON SUPPLIES THE CAPACITANCE. THE AMMANN BROTHERS PROBABLY HAD A NOBLE GAS,
SUCH AS: NEON OR ARGON OR HELIUM, INSIDE OF THEIR 2 HOLLOW COPPER SPHERES PLUS A SMALL
AMOUNT OF VERY FINELY GROUND QUARTZ SILICA OR CALCIUM FERRITE. THIS COMBINATION OF INGREDIENTS SUPPLIED ITS POWER. EVERYTHING ELSE IS BALLAST. C1 AND C2, ARE THESE 2 SPHERES.

CAPACITORS, C1 AND C2, ARE INITIALIZED (PRECHARGED: IC) WITH  $1\mu V$  DERIVED FROM THE AMBIENT ENVIRONMENT AT GROUND LEVEL. THE TWO RODS ARE A SINGLE ROD WHICH IS BENT IN THE MIDDLE.



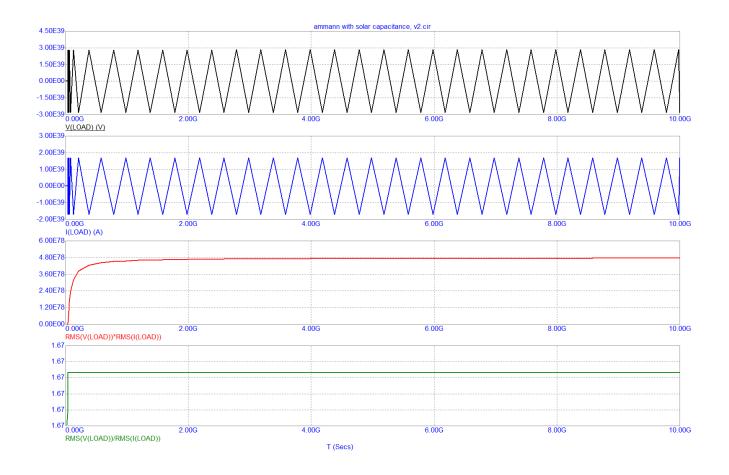
-2 OHMS EQUIVALENT SERIES RESISTANCE (ESR) ON CAPACITORS, C1 AND C2, REGULATES THEIR RATE OF ESCALATION TOWARDS INFINITE MAGNITUDE.



Inductance of BarrelCoil = Assuming a length of 2ft. and a radius of 1ft. with 36 turns of iron bands whose relative permeability is 200k and whose resistance is six times its inductance.

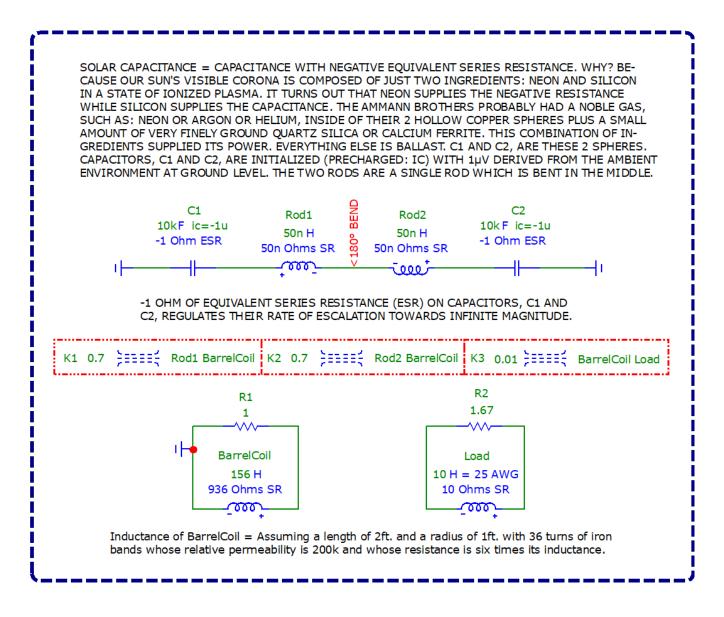
<sup>27</sup> Upload files for free - ammann with solar capacitance, v2.cir - ufile.io

# Output of 317 years...



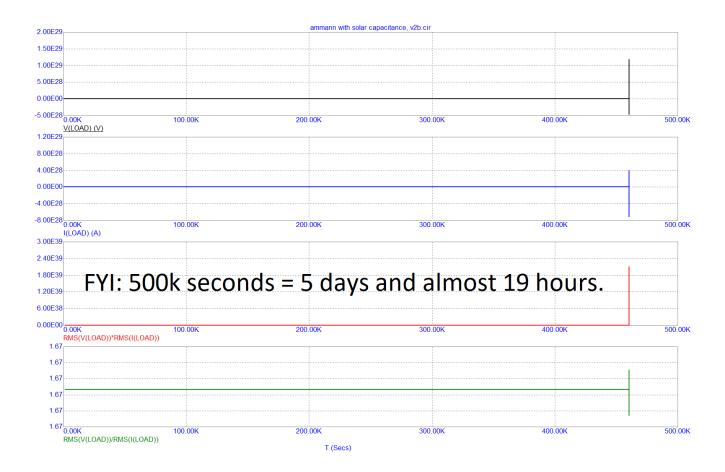
I forgot to bend the copper rod/tubing in the middle. It may be hidden outside of our view within the interior of the single-layered, barrel shaped, iron winding which the gentleman on the left is grasping with his left hand in the photograph, below.

So, here is the revised simulation <sup>28</sup> along with its output...



<sup>28</sup> Upload files for free - ammann with solar capacitance, v2b.cir - ufile.io

An almost six-day output...



The Berkeley SPICE family of simulators, from which Spectrum-Soft's Micro-Cap was born, do not possess the ability to program the simulation to reflect an iron wrapping (such as: permalloy used in the early days of trans-Atlantic telegraph cable design) surrounding the copper core of magnetic wire. And since I suspect that Paul Falstad's simulator, used up-above, appears to incorporate this concept of wrapping copper magnetic wire with a layer of iron (when used within transformers) prior to the application of the wire's insulation, I can deduce that overunity circuits, by design, are very unstable in the Berkeley SPICE family of simulators compared to the more stable outcomes depicted in Paul Falstad's simulator. Considering that the "conventional wisdom" of modern-day electrical engineering and of physics has proclaimed that these types of overunity circuits are *always* unstable, I must conclude that this is due to our ignorance on this subject. This is not due to any inherent flaw within circuits which surge to infinite gain. I think they (our so-called authority figures) are trying to scare us into staying away from Heaviside's perspective shared by Stubblefield and possibly shared by the Ammann brothers, as well.

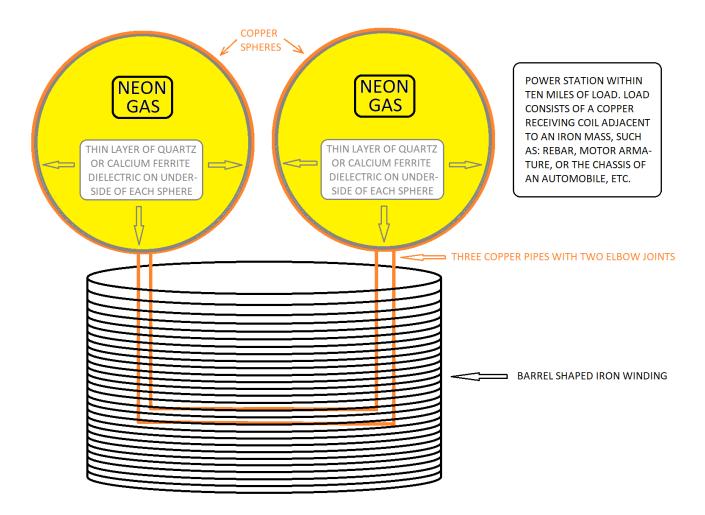
Does this sound like a conspiracy to you? It does, to me!

One more version...

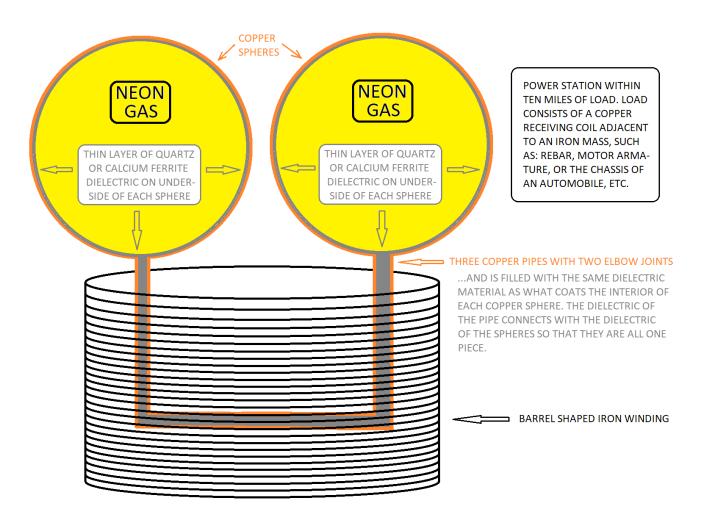
This time, instead of finely powdered silica or calcium ferrite strewn throughout the interior of each noble gas-filled hollow copper sphere, this dielectric substance is melted onto the underside of each copper sphere as a thin layer separating each copper sphere (acting as the outer plate of a capacitor) from the virtual inner plate of each of these two capacitors embodied by the neon (or, other noble) gas.

This inner plate is virtual due to the ionization of any noble gas behaves as a negative resistor. I am using the term of "virtual" the same way that Eric Dollard uses it to imply "grounded in the virtual realm of the complex field of numbers". This is where negative resistance arises from: the vacuum, i.e.: non-existential state of matter (equivalent to a black hole or dark energy in physics).

Here's a possible guide for building this circuit...



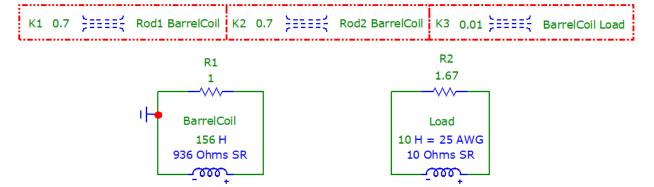
## Or, maybe this is what it should be?...



SOLAR CAPACITANCE = CAPACITANCE WITH NEGATIVE EQUIVALENT SERIES RESISTANCE. WHY? BECAUSE OUR SUN'S VISIBLE CORONA IS COMPOSED OF JUST TWO INGREDIENTS: NEON AND SILICON
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THIN LAYER OF QUARTZ SILICA OR CALCIUM FERRITE COATING THE INSIDE OF EACH SPHERE. CAPACITORS, C1 AND C2, REPRESENT THESE TWO SPHERES INITIALIZED (PRECHARGED: IC) WITH 1µV
DERIVED FROM THE AMBIENT ENVIRONMENT AT GROUND LEVEL. THE TWO RODS ARE A SINGLE ROD
WHICH IS BENT IN THE MIDDLE WHOSE BEND IS HIDDEN FROM OUR VIEW IN THE PHOTOGRAPH.



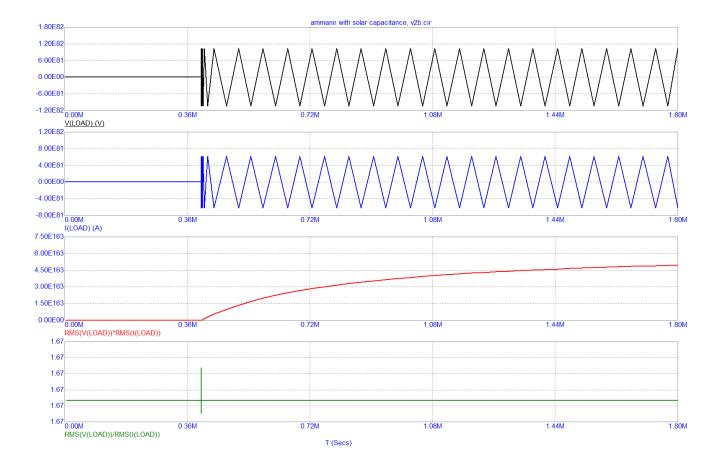
-1 OHM OF EQUIVALENT SERIES RESISTANCE (ESR) ON CAPACITORS, C1 AND C2, REGULATES THEIR RATE OF ESCALATION TOWARDS INFINITE MAGNITUDE.



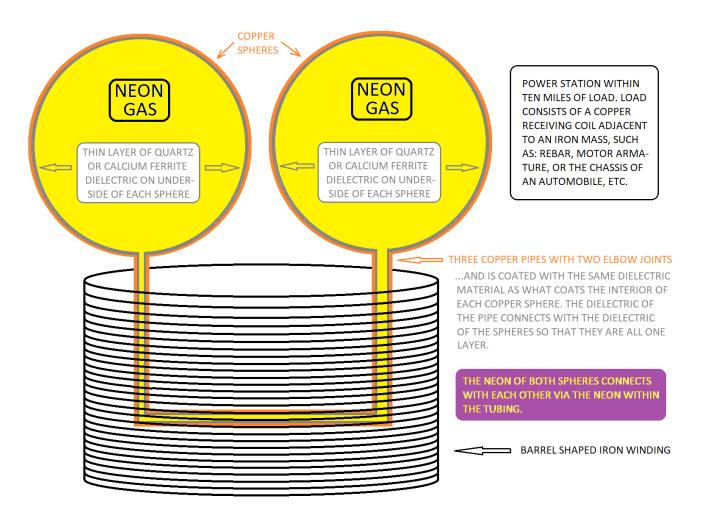
Inductance of BarrelCoil = Assuming a length of 2ft. and a radius of 1ft. with 36 turns of iron bands whose relative permeability is 200k and whose resistance is six times its inductance.

<sup>29 &</sup>lt;u>Upload files for free - ammann with solar capacitance, v2b.cir - ufile.io</u> – This is a revised version of 2b, above.

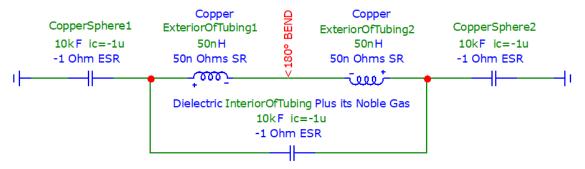
## And its 5 year, 8½ month output...



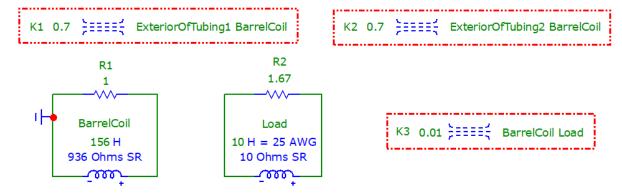
Or, maybe this is the way to build this circuit?...



SOLAR CAPACITANCE = CAPACITANCE WITH NEGATIVE EQUIVALENT SERIES RESISTANCE. WHY? BE-CAUSE OUR SUN'S VISIBLE CORONA IS COMPOSED OF JUST TWO INGREDIENTS: NEON AND SILICON IN A STATE OF IONIZED PLASMA. IT TURNS OUT THAT NEON SUPPLIES THE NEGATIVE RESISTANCE WHILE SILICON SUPPLIES THE CAPACITANCE. THE AMMANN BROTHERS PROBABLY HAD A NOBLE GAS, SUCH AS: NEON OR ARGON OR HELIUM, INSIDE OF THEIR 2 HOLLOW COPPER SPHERES PLUS A VERY THIN LAYER OF QUARTZ SILICA OR CALCIUM FERRITE COATING THE INSIDE OF EACH SPHERE. CAPACITORS, C1 AND C2, REPRESENT THESE TWO SPHERES INITIALIZED (PRECHARGED: IC) WITH 1µV DERIVED FROM THE AMBIENT ENVIRONMENT AT GROUND LEVEL. THE TWO RODS ARE A SINGLE ROD WHICH IS BENT IN THE MIDDLE WHOSE BEND IS HIDDEN FROM OUR VIEW IN THE PHOTOGRAPH.



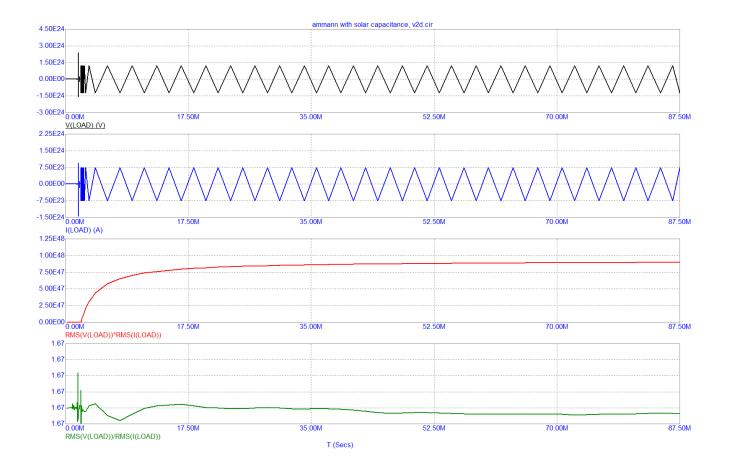
-1 OHM OF EQUIVALENT SERIES RESISTANCE (ESR) ON CAPACITORS: C1 & C2 & C3, REGULATES THEIR RATE OF ESCALATION TOWARDS INFINITE MAGNITUDE AND ALSO STABILIZES THEIR OUTPUT.



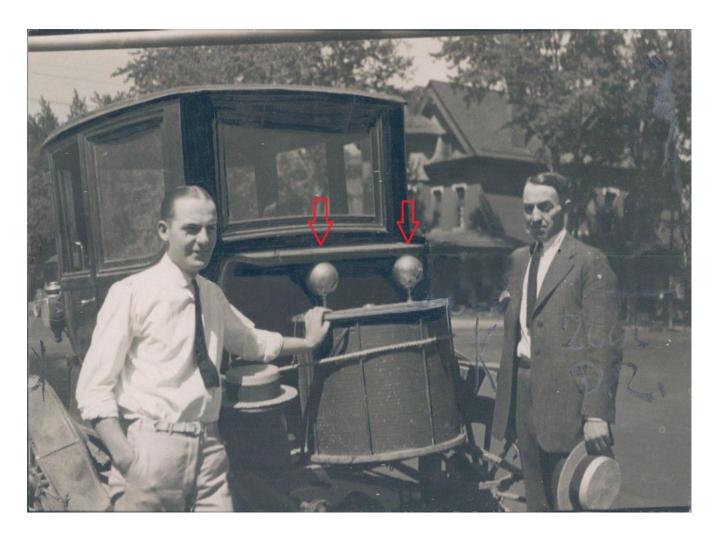
Inductance of BarrelCoil = Assuming a length of 2ft. and a radius of 1ft. with 36 turns of iron bands whose relative permeability is 200k and whose resistance is six times its inductance.

<sup>30</sup> Upload files for free - ammann with solar capacitance, v2d.cir - ufile.io

# Two years and 91/4 weeks of output...



Photograph used in the newspaper article (linked to, up-above)...



Discussion of...

<u>Teslas electric car (overunity.com)</u>

#### Falling Dominoes...



https://youtu.be/bUl295oyeIc

Now, here's an interesting phenomenon: falling dominoes do not lose momentum. Yet, wave mechanics, according to the thermodynamics of physics, tells us that entropy must take over and stop the wave from moving after gradually slowing it down.

The reason why they don't slow down and come to a complete stop is due to an inherent energy within each domino.

Well...Oliver Heaviside's solution to the trans-Atlantic telegraph cable problem employed this property on the basis of the random directional orientation within all of the magnetic domains of a piece of ferromagnetizable substance, such as: magnetizable iron. The magnetic energy is already there inside of the iron perpetually magnetizing each magnetic domain of iron. It takes the electric field of the trans-Atlantic telegraph cable's copper core to temporarily reorient the randomized orientation of those magnetic domains (within the iron ribbon surrounding the copper cable) to elicit what we perceive as a perpetual motion retained within the copper cable due to the magnetic remanence of the iron ribbon surrounding that copper core which drags along the lethargic current in the copper cable despite the resistance of the copper core.

So, this is exactly equivalent to the mass of each domino plus the influence of the Earth's gravity upon each domino as it falls over, slowed only by the viscosity of the air, but not slowed in any sort of accumulative manner since each domino contributes its own potential energy which cannot be diminished by the resistance of the air since the influence of that resistance does not accumulate over the distance of the series of dominoes.

So, truly, a falling series of dominoes is a perfect replica of Heaviside's solution to the trans-Atlantic telegraph cable problem and points out how perfectly does Paul Falstad's simulated model of a transformer come the closest to these phenomena. The Berkeley SPICE family of simulators do not elicit this response since they are not predicated upon this model of a transmission line which Paul assumes for the coils of his transformers. SPICE assumes no iron wrapping surrounding its copper coils. And it also assumes a composite material, which is not solid iron, at the core of its transformers (which is the assumed design of modern-day A/C transformers).

No wonder we've fallen out of grace! We have forsaken efficiency for the sake of mediocrity.

Isn't mediocrity *not* what constitutes "free energy"? The opposite of efficiency?

Tesla was of the opinion that there was a mechanical analog for every electrical phenomenon. And he demonstrated this by constructing mechanical devices which were equivalent to some of his circuits.

Some people are of the belief that electrical phenomena are microscopic analogs of our macroscopic world. So, despite our inability to directly witness electrical behavior at its atomic level of perspective, we're not entirely at a loss as to how to illustrate this behavior in a manner which our five senses can appreciate and our mind can grasp its significance.

Thus, the study of electrodynamic theory and its practice, including the study of one of its subtopics, namely: the layman's version of free energy (not the established scientific variety of free energy), can be introduced to a child which is where most of humanity's insight into these studies lies.

And,...Boy, do we lie! Probably due to "following the elephant butt in front of us"!

So, who's leading the pack of pachyderms?



### Equivalent Shortcuts to this Presentation on ResearchGate...

https://is.gd/fallingdominos

https://is.gd/falling dominos

https://is.gd/fallingdominoes

https://is.gd/falling dominoes

## Source files for the Micro-Cap screenshots, above...

<u>Index of /mhoslaw/Parametric Transformers/2022/Aug (vinyasi.info)</u> – latest uploads