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Leland Anderson
2525 South Meade Street
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Dear Lee,

I can not tell you the amount of sleep I have lost, agonizing over your fabulous book, reading every passage, every nuance, over and over again. Ever since that meeting with you and Ken Corum in your hotel room at the Symposium, I have struggled over what must have been Tesla's final configuration at the Wardenclyffe Plant. I suppose it is a natural human characteristic to try to complete the seemingly missing pieces of the riddle; to finish the mosaic. To this end, I wonder if more information might be found in researching the archives of the New York Times, or perhaps some other local newspaper of the 1901-1907 era? Maybe there could be some clues uncovered in trying to review company records of Westinghouse Corp., or interviewing the heirs of J.P. Morgan. or others that were associated with Tesla at that time.

At this point, I am most consumed with the apparent fact that Tesla did not complete his apparatus for this installation. He refers to "corking fine methodes" on page 176. In looking at the illustration on page 148, the tower is clearly void of any device (oscillation transformer). Is it underground, mounted on some form of hydraulic shaft that could be raised and lowered, as I believe was suggested by Ken Corum?

The following is what I believe to be the case. 1) The power house contained Tesla's multiphase alternators, power transformers, rotary break(s), oscillation capacitors, and tuning inductances. 2) The arrangement of the alternator was such that an armature shaft extension provided for two different forms of rotary spark gap assemblies. The first was a rotary rectifier (this device was commonly used in later high power x-ray machinery as a means of converting a.c. to unfiltered full wave d.c.). Tesla had already realized the material advantage of converting to d.c. before applying that power to his resonant primary tank circuit. The second form of gap was a syncronous rotary break, which was often used in the oscillation circuit. 3) If there was a resonance transformer(s), it was to be located at the base of the tower. The cables running from the power house to the base of the tower housed high power coaxial lines (transmission lines) which were to be impedance matched with a VSWR of 1:1, by means of the tuning inductances that were also located inside the power house. 4) Assuming that the resonance transformer was yet to be built, I believe that Tesla experimented with the tower by shunt feeding a telescoping mast that could be raised and lowered out of the underground shaft with the upper end either capacitivly coupled or direct connected to the elevated capacity. 5) Since Tesla stated that it was necessary to place a toroid type of electrode (implied) on top of the brick chimney of the power house, and to locate the tower (center of base?) at a distance of 350 feet (ref. pg.151) from that point "on account of the potential which I was to develop", one would have to conclude that a resonance transformer of considerable size (as well as an extra coil) would have to be employed. In fact, it should follow that THIS ASSEMBLY would eclipse the size of his former apparatus, as deployed at Colorado Springs. WHERE IS IT? WHERE IS IT DESCRIBED, DRAWN, PHOTOGRAPHED, OR OTHERWISE DOCUMENTED? At what point in time was it built or experimented with?

It is interesting to note that to the best of my knowledge, until you published this work, no former photograph(s) were ever shown, or known to exist depicting a high frequency discharge from the ball atop the mast at Colorado Springs! The photo on page 111, shown as figure 68, seems to align with the elevation of the terminal as shown on page 116. I don't believe that Mr. Alley or whoever took that photograph, had the type of telephoto lens necessary to record an image such as is shown, if the apparatus was at an elevation as is shown in figure 73 on page 117. The actual length of the discharges shown in figure 68 is bothersome, in terms of Tesla's description, in so far as it is apparent from the point of emination of the seperate sparks, to approximate the curvature of the sphere, which was stated as being 32 inches in diameter (page 120.) Therefore, in this photograph, the majority of dishcarges could not have been more then 16 to 20 feet.

As for the typos that I had previously mentioned to you, at present, I can only locate one. It is on page 168 and reads "The instrument shown [Fig. 100]" and I believe it should read Fig. 101.

I would like to again mention that I would be willing to do almost anything, to obtain a copy of the slides that you showed in your room that morning at the Symposium. I also believe that now that this wonderful book of yours is in print, it beckons a second volume with more illustrations and photographs in support of this era of Tesla's career.

Turning to another item, I am in the process of designing my Model 15 Tesla Coil system! It will be a 1/4 wave coil (singular) as opposed to the 1/2 wavelength coils of the Model 12 system. It will have a toroid capacity electrode 10 feet in diameter by 3 feet in cross-section. It will have 3,400 feet of # 8 A.W.G. wire, space wound on a form 5 feet in diameter by 16 feet in height. It will be either shock excited from a seperate primary/secondary system, or will have an adjustable coupling primary, that may be installed at the base of this coil. Only problem is, I have no place to operate or test it! I intend to produce discharges up to 60 feet or so with this coil, at a power input of around 75 KVa. But I need a better source of power and more room! So, I am now activly looking for a new location, to set up my experiments and also my manufacturing of coils and systems for others.

The photos I have seen from the shows at the Cheyanne Mountain High School seem to have turned out very good. I remember that you also were taking photos and I wonder how did they turn out? I wish to mention that I very much appreciated your comments on the construction and demonstration of my coils at that occasion. Your remarks, which I always hold in the highest regard, I took as my greatest reward for all the hard work and effort.

I will close for now Lee. Please write soon and let me know what you are up to these days, and let me know your thoughts about what I have written here.

Sincerely yours,

2525 South Meade Street
Denver, Colorado 80219

August 16, 1992

William C. Wysock
2527 Tree Lane Avenue
Monrovia, California 91016

Dear Bill,

A belated congratulations on the magnificent "Model 12"!

There wasn't enough time to talk to you in Colorado Springs, and I want to especially comment on the beauty of the construction. I took particular notice of the detuning effect of the coil on the left (as viewed from the audience) because of the metal influence behind that wall and the necessary primary coil adjustment to overcome it. I hope that you'll be able to realize some economic benefit to offset your personal investment in this equipment.

Are you going to lug the Model 12 to Colorado Springs again in two years or insist on ITS holding its Symposium out there?

I appreciate your letting me read the page comments that you made in your copy of NIKOLA TESLA ON HIS WORK WITH ALTERNATING CURRENTS AND THEIR APPLICATION TO WIRELESS TELEGRAPHY, TELEPHONY, AND TRANSMISSION OF POWER. You mentioned to me that somewhere in it a "to" should be "too." Sometime, before the next printing or edition, I'd appreciate your letting me know where this is--I haven't been able to find it.

The best to you as always,

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