

## **An Inventor's Life & Times at the Old Mine** **by Professor A.D. Conrow**

As was often my habit, taking a small nap after lunch seemed like a good idea until the phone rang. It was my old friend Bob Winn calling to see if I would be interested in setting down a little background concerning my past accomplishments and adventures in the name of science! It would seem that Bob thought that the local readers of this paper would be interested in learning more about the old, eccentric inventor that I have become! After speaking with Bob on the phone for several minutes, a loud *crash* could be heard from inside my mountain workshop & lab, high up in the Boston Mountains of the Ozarks. "Come quickly Professor Conrow," I heard my assistant cry as I lept to my feet -- more of an autonomic response, I noted, than one of deliberate thought. Upon entering the main machine shop, I could already see what the matter was. The electric hoist cable had let-loose above the old coal mine shaft, and dropped the lift down the full 75 feet or so into the abandoned coal shaft itself.

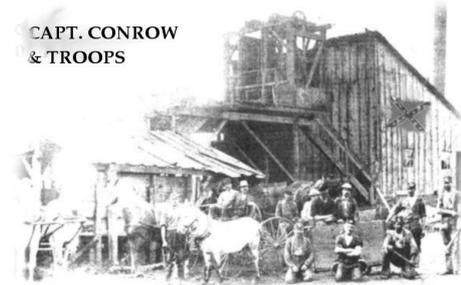
Perhaps, Dear Reader, I am getting ahead of myself, in that, you may not be acquainted with my setup here in the mountains, and how exactly I came to be situated atop an abandoned coal mine, in the first place, and to what bearing that could possibly have upon my current profession or projects!

### FAMILY BACKGROUND

My family is descended from several long lines of early American pioneers, gamblers, gunfighters and inventors. A strange brew of personal traits that I have inherited and admit to. One of these lines leads directly to the famous outlaw (hero to some & devil to others) Jesse James of Missouri. Back during the war between the

Northern and South (Civil War) the James brothers were known for their handiwork throughout SW Missouri and NW Arkansas. In fact, the coal mine, to which I earlier referred was a working affair back in the 1860's and '70s, and became a favorite hideout for the James brothers and their gang. My grandfather, Captain Conrow, owned the "works" which set atop the old coal mine. It included a small ironworks and machine shop, complete with brass & iron foundry. The "said operation" was located in a very remote location, far from any road of significance, so that marauding bushwhackers couldn't harm them. Many rifles, pistols, canons and wagons were repaired or produced here, along with the casting of thousands of rounds of lead ammunition, grape shot and cast iron canister shot.

CAPT. CONROW  
& TROOPS



Using the coal from the mine, and limestone from just above the coal-seam, Capt. Conrow and his men could cast iron with power produced by the water-wheel in the creek below the entrance to the mine. Later, the water-wheel was replaced with a small Francis turbine, and a Westinghouse generator was fitted to produce 440 volts AC, at 25 cycles per second, for the machine shop.

I was born in 1889, and by the early 1890's, my father had already begun conducting experiments with electricity here at the works, in addition to providing the area with blacksmithing and manufacturing services. My father, Doc Conrow, (Capt. Conrow's son) was an inventor himself, and quickly put electricity to work turning motors, and lighting Edison's early bulbs at the shop, and even to do brass plating upon

the cast iron he produced in his small foundry.

Incidentally, it was one of Doc Conrow's Westinghouse motor shafts that had broken off, and caused the crash that disrupted my midday phone call from Bob, to which I had earlier referred.

### MY EARLY YEARS AT THE MINE

Growing up at "The Diggings", as the locals referred to our old mine and shop, was an interesting education in and of itself. After cutting my teeth on the lathe and milling machines, not to mention burning myself from time to time pouring white hot iron and brass, I slowly learned all of the ins and outs of the metal and woodworking trades. Because my father was so interested in electricity and believed that it was "the future for mankind", I was also well home-schooled in electrical and chemical theory, as well as practical applications. This early training would serve me well when I was shipped off, in 1910, to my uncle's farm near Manhattan, Kansas. There I attended the Division of Engineering within the Kansas State Agricultural College, and graduated as an Electrical Engineer in 1913.



My first job was at George Westinghouse's fabulous manufacturing "works" in East Pittsburgh, Pennsylvania. I was quickly promoted to head of the Alternator Testing Department and studied directly under my mentor, the esteemed Mr. Benjamin Lamme, a true genius! I suppose that Mr. Lemme saw in

me a unique talent for high-frequency work, and had me help out with the initial planning of Westinghouse's experimental wireless station. I had been an avid radio experimenter since before my college days, and this seemed to fit in very nicely with what was about to unfold for me with Uncle Sam.

By 1917, the World War was on everyone's mind and I jumped at the chance to contribute to the war effort. Although, to this day, I am not allowed to fully disclose my many wartime adventures, suffice it to say that it was interesting and educational. In fact, WWI was to have such a profound influence upon the course of my later life that I will cover it in more detail in a separate piece.



The Army Signal Corp radio telephony efforts were in their infancy in those days, and my work was involved initially with that at Fort Monmouth, and then later, in a more secret operation involving what would later be called "One Way Voice Links and Numbers Stations", to provide unbreakable, coded messages to Army personnel in-the-field.

After my service, I was discharged in 1919 and was quickly hired by Westinghouse's old rival General Electric, Co.. It was here, at GE, that the roots

of my later work were established. Because of my background at Westinghouse and close ties to Mr. Lemme, I was again put in charge of testing apparatus of various types. It was soon after my arrival that I was placed under the tutelage of Mr. Irving Langmuir, up in his research facility at Schenectady, New York. There we worked on extremely high vacuum apparatus for electron tube applications, as well as plasmas and their various applications. Mr. Langmuir was by far the smartest person that I ever worked with, and that would include the great Tesla himself.



Although I am certainly a fan of Tesla, particularly his early work, we were never really able to "hit it off" so to speak. At the time, I thought that it was something about me and my outgoing southern personality that must have offended him, but I was to learn from others that he treated almost everyone with the rather cool and distant detachment of a proper 19<sup>th</sup> century Eastern European Aristocrat. After I realized this fact, we arrived at a delicate balance of give and take in our conversations that eventually made extended conversations quite pleasant. I will go into much more detail, in a later article about my involvement with Dr. Tesla, as well as Edison. Suffice it to say, that with the

above mentioned background, I was afforded many, many adventures around the world, the vast bulk of which began as I worked to bring a new invention or idea to life, back at the Old Coal Mine. It was always here, at the mine itself, that I was most comfortable, having everything that I needed for experimenting, and my manufacturing company, ADC Radiolab. In the past 40 years I have produced everything from wireless radio sets and lab apparatus, to ghost hunting devices, Edison Spirit Predictors, Tesla Nightlights, and even Einstein's Desk-lamps. I have built electric Model T "pick-up" trucks, steam-powered airships, airplanes, and even an ill-fated submarine... many stories!

One other thing that I should mention is my asthma and the anxiety condition that accompanies it. I can't say enough about the fine mountain air up here at 2000 feet of elevation, deep in the forest of tall oaks and walnuts. Because of my life-long health issues related to my asthma, the Old Mine has become more and more of a refuge for me. Now that my life has come full circle, so to speak, I will set down some of my more exotic and interesting adventures for my dear readers, in the hope that they might find some amusement from them!

