William S. Lee Dies; Carolina Power Pioneer

Figure in Development of Industry, He Made Over Geography of Two States

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Mr. Lee was a noted figure in the industrial development of the Carolinas, and because of the great projects he guided he was credited with having virtually made over the industrial geography of the two states.

Mr. Lee also was associated with the great power development along the Saguay River in Quebec, a project which ultimately involved the development of 2,000,000 horsepower. In this project and throughout the Carolinas engineering feats which he accomplished Mr. Lee had the almost unlimited financial backing of James Buchanan Duke, the tobacco manufacturer, whom he met on earlier engineering work in harnessing the potential water power of the Catawba River in the Carolinas.

Invented "Lee Pin"

Mr. Lee was born at Lancaster, S. C., January 30, 1870. He studied civil engineering at the South Carolina Military Academy at Charleston, now The Citadel. One of his earlier inventions, of which many still are actively used in engineering, was the "Lee pin," an insulating pin used in power transmission, especially with high voltage wires.

After his graduation and the fulfillment of an obligation to the state to teach two years in public schools under the terms of his scholarship, Mr. Lee began in 1894 to work as a hydro-electrical engineer.

He went immediately to the Seacoa River, ten miles from Anderson, S. C., as a resident engineer. His first assignment was to string a transmission line across the river, a task which he accomplished, after others had bungled it, in ten days. Out of that incident began a legend in South Carolina that Mr. Lee had begun his engineering career as a lineman, for Mr. Lee's career almost became legendary in the Carolinas.

At the Catawba River plant, near Rock Hill, S. C., where Mr. Duke and Mr. Lee were associated, Mr. Lee made his engineering reputation. Three previous efforts to dam the river had proved disastrous. Lee finished the job in seven months with Mr. Duke's backing and engineering aid. This was the beginning of the super-power zone which the Duke millions set at work in the Carolinas, one of the most complete electric power units in the nation.

Made Foundation Trustee

Later Mr. Duke helped the state erect eleven huge power plants on the Catawba's banks. Mr. Lee became vice-president and chief engineer of all the separate enterprises.

So high was Mr. Duke's regard for the young engineer that Lee, in the Duke will, was made a trustee of the great Duke foundation of some $600,000,000.

Mr. Lee had been an engineer in hundreds of hydro-electric jobs throughout the East and South. He designed and erected the Piedmont & Northern Railway, a high speed, 1,000-volt direct current railroad, consisting of about 160 miles of track located in North and South Carolina, and an accepted model of electrical railroad design.

Mr. Lee served during the Spanish-American War in the United States Engineering Department designing fortifications for the Carolina coast line. He was also called in for consultation when the proximity of German submarine warfare threw a scare into the Navy Department, which set at once to work on plans for naval fortifications all along the Atlantic seaboard.

He was a past president and fellow of the American Institute of Electrical Engineers; a member of the American Electro-Chemical Society; member of the American Societies of Civil Engineering and Mechanical Engineering, and a fellow of the Engineering Institute of Canada.

He married Mary Martin of Columbus, Ga., in 1901. They had three children, W. States and Martin Lee and Miss Martha Lee.