Thomas H. Leggett (1859-1935)

2011 Inductee from Mining's Past

Thomas Leggett graduated from the Columbia School of Mines in 1879. He first worked at an iron works in New York. When the plant shut down in 1880, his next job was at the Botapilas silver mines in Chihuahua, Mexico. Here, he learned much about concentrating lead-silver ores. In 1884, he worked as an assayer at a smelter in Lake Valley, New Mexico. The smelter closed in a few months, whereupon Leggett was hired as a mining engineer with the New York and Honduras Mining Co. in Honduras, working there until 1887. He then returned to Colorado to conduct an eight week test program for a friend. Following this, he went to the Darien peninsula in Panama in the fall of 1888. The climate caused health problems, so he returned to the US in 1890. Following a six month period to regain his health, he became the manager of the Standard Consolidated Mining Co. in Bodie, CA.

While Leggett managed this mine, two significant events occurred. It became one of the pioneers in using cyanide for the recovery of gold and silver. In 1894, he built the first cyanide plant on the Pacific coast at Bodie. The second event, with consequences far beyond the mining industry, was the long distance transmission of electricity. Faced with having to use wood for fuel, Leggett searched for cheaper alternatives. He discovered that in 1892, alternating current had been successfully transmitted three miles at Telluride CO. He installed a 250-kw Westinghouse generator powered by Pelton water wheels with a 300-foot head. The power generated was at 3000 volts and was carried 13 miles on a #1 bare copper wire. By late 1894, the system was considered proven and the steam powered equipment removed.

Following his success at Bodie, Leggett worked as a consulting engineer in the South African gold mines for eight years. After his African experience, he became a consultant in New York City.