

Biographical Information

Joseph Barlow Lippincott



Joseph Barlow Lippincott* was born in Scranton, Pa., on October 10, 1864, the son of Joshua Allen and Harriet (Phillips) Lippincott. He attended Dickinson College at Carlisle, Pa., from 1880 to 1882, when the family moved to Kansas where he entered the University of Kansas at Lawrence.

Upon his graduation he worked as track engineer in Missouri for the Santa Fe Railway System, and, in the spring of 1889, was promoted to the position of division engineer.

From 1889 to 1892 Mr. Lippincott was topographer for the U.S. Geological Survey in charge of making topographic maps in New Mexico and California. In 1893 he became assistant engineer for the Bear Valley Irrigation Company, on the construction of an early irrigation project on the headwaters of the Santa Ana River in Southern California.

In 1895 Mr. Lippincott accepted the position of resident hydrographer for the State of California, with the Hydrographic Branch of the U.S. Geological Survey. At this time there were practically no stream-flow measurements available in this area. He established many of the gaging stations on the principal streams and secured local observers who served without pay. The rainfall and stream-flow records obtained in this early day were of great value in developing plans for the future water supply of California.

In the fall of 1897 and the spring of 1898 Mr. Lippincott served as a member of the board of consulting engineers of the City of Los Angeles, Calif., in connection with litigation in the San Fernando Valley over the pueblo rights of the city.

In the spring of 1899 Mr. Lippincott prepared an exhaustive report for the Geological Survey on the water supply, available reservoir sites, and irrigable areas on the Gila River in southwestern Arizona. After this assignment he made a comprehensive study of the development of the surface waters of the upper Santa Ana River and the San Bernardino artesian basin. The results of both of these studies were published in the *Water Supply Papers* of the U.S. Geological Survey.

With the organization of the U.S. Reclamation Service in 1902 Mr. Lippincott became supervising engineer of all Reclamation Service activities in the Pacific Coast region extending from the Klamath River in Oregon to the lower Colorado River in Arizona and California. His work included the preparation of plans and estimates of cost and construction of the Klamath and the Yuma projects until July 1905.

The need for additional water for the City of Los Angeles was brought forcibly to the attention of the water commissioners in July of 1904 when, for a ten day period, the daily consumption exceeded the inflow into the city's reservoirs by nearly four million gallons. In 1905, Mr. Lippincott was appointed with O.K. Parker and William Mulholland to a board of engineers which was to make recommendations in regard to the expansion of the water supply, investigating seven sources. The decision was that the Owens River was the nearest adequate supply and that to augment the city's needs temporarily at lower cost by withdrawals from adjacent artesian areas would result in the curtailment of the development of the surrounding country.

In July 1906, Mr. Lippincott left the Reclamation Service to become assistant chief engineer of the Owens River Aqueduct. When completed, the Owens River Aqueduct had a capacity of 400 cu. ft. per sec. and consisted of open-canal, covered conduit, steel and concrete siphons, sixty miles of tunnels, five dams, storage reservoirs, and three hydroelectric power plants for construction purposes. One of the first municipal projects of magnitude to be built by day labor under the supervision of its engineering staff, this was a monumental undertaking for such a small city. Mr. Lippincott had much to do with the final location of the aqueduct, was in charge of the preparation of the detail plans and estimates of cost, and initiated and established a new system of construction cost keeping together with the bonus system which developed keen rivalry between different divisions and aided in breaking many records for rapid tunnel construction.

Upon the completion of the aqueduct in 1913, Mr. Lippincott entered private practice at Los Angeles, specializing in water supply for irrigation and municipal uses under the firm name of "Engineering Offices of J.B. Lippincott," in which company he was active until the time of his death. During this period he was engaged as consultant on water supply investigations and water works construction for many of the western cities including Los Angeles, San Francisco, Oakland, Alameda, Berkeley, Santa Barbara, San Diego, Long Beach, Riverside, San Luis Obispo, Ventura, Orange, Santa Ana, Whittier, Avalon, and Fullerton, in California; Denver, Colo.; El Paso, Tex.; Phoenix, Ariz.; and others. In addition, he was consultant for many irrigation districts throughout the west including San Fernando Valley Irrigation District, Santa Fe Irrigation District, Vista Irrigation District, Lindsay Strathmore Irrigation District, and numerous others.

Mr. Lippincott made several trips to the Hawaiian Islands where he was employed by the Oahu Sugar Company in connection with the Waiahole water supply and the construction of the Nuuanu reservoir. He also served as consultant on the Wahiawa Water Company's spillway project and later was employed by the City of Honolulu in connection with its domestic system.

His work also included investigations and a report on the diversion of a large water supply from one watershed to another near Fairbanks, Alaska, for a large hydraulic mining operation.

Mr. Lippincott served on many boards of consulting engineers for the federal government, the State of California, and various municipalities. He was a member of a board of engineers on the preparation of the original flood control plans for Los Angeles County in 1915 and later, for a time, was consultant during the construction of this project. His office also prepared plans for flood control

and water conservation for Santa Barbara County and Orange County, California. As a member of the consulting board of the State of California, he aided in the development of a state-wide water plan. At the time of his death he was consulting engineer for the International Boundary Commission between the United States and Mexico, as well as consulting engineer for the U.S. Engineer Office, Los Angeles District, on the design and construction of numerous large flood control dams and appurtenant works. He was also a member of the advisory committee on the U.S. Weather Bureau for the National Sciences Advisory Board.

Mr. Lippincott died on November 4, 1942, at Arlington, Calif. at the age of 78.

* This biographical sketch is extracted from the "Memoir" on Lippincott prepared by Kenneth Q. Volk and Edgar Alan Rowe which appeared in the *Transactions of the American Society of Civil Engineers*, volume 108, 1943 (pp. 1543-1550).