

Ernest E. Howard



Ernest Emanuel Howard was born at Toronto, Canada, February 29, 1880, and graduated from the University of Texas in 1900, with the degrees of B.S and C.E. Immediately after graduation he was engaged in irrigation works for rice fields in lower Louisiana, afterward returning to the University of Texas as instructor in Engineering, and spending some time working for the railroad commission of that state under R. A. Thompson, its chief engineer.

In June, 1901, he was hired by Dr. John Alexander Lowe Waddell, Consulting Engineer, in Kansas City, Missouri, and rose rapidly in his employ. After some office work he was made Assistant Engineer on the construction of the Red River Bridge at Alexandria, Louisiana, until its completion in 1902, after which he returned to the office for a year, then went to Mexico as Assistant Engineer on the extensive bridge work of the Vera Cruz and Pacific Railway, becoming Resident Engineer in Charge in September, 1903, which position he retained until the completion of the entire work in 1904. Next he took charge of the construction of the James Street Bridge and the reconstruction of the Ohio Street Bridge, both over the Kaw River in Kansas City, Missouri; and from March, 1905, until its completion he was in charge of the construction of the Sixth Street Inter-city Viaduct in Kansas City.

When the firm of Waddell & Harrington was formed in January, 1907, Howard became the Principal Assistant Engineer; and in September, 1910, he was made Associate Engineer. During the five years of the firm's existence, Howard took an active and responsible part in the designing and construction of over \$10,000,000 worth of bridge work, including the design and construction of the Colorado Street Bridge over the Arroyo Seco in Pasadena, California.

His personal work covered every detail in bridge engineering of every kind, from the conception of projects to their materialization and the finishing of the structures; also examinations and reports upon old bridges, and aiding in the evolution of new and improved types of movable spans.

After the dissolution of Waddell & Harrington, Howard established the firm of Howard, Needles, Tammen & Bergandoff, now known as HNTB.