



O. H. Ammann

Othmar Hermann Ammann

1879-1965

By Thomas C. Kavanagh

Othmar Hermann Ammann, partner of the firm of Ammann & Whitney, Consulting Engineers, New York, and a Member of the National Academy of Engineering, died at his home in Rye, New York, on September 22, 1965, at the age of eighty-six. His passing brought to a close an active, sixty-three-year engineering career during which he came to be known as the "master bridge builder of our time."

Mr. Ammann was born on March 26, 1879, in Schaffhausen, Switzerland, where his family had been established since the twelfth century. His father had been a manufacturer; his forebears had been physicians, clergymen, lawyers, and government leaders. He studied at the Swiss Federal Institute of Technology, graduating in 1902 with the degree of Civil Engineer.

Following graduation he worked as a design engineer on reinforced concrete structures with a contracting firm in Frankfurt, Germany. In 1904 he came to the United States, where he undertook a design position with Joseph Mayer, a consulting engineer, which initiated his career-long involvement with bridges. He assisted Mayer in proposals for a cantilever railroad bridge to span the Hudson River at New York City. In 1905 he joined the Pennsylvania Steel Company, advancing from draftsman-designer to Assistant to the Chief Engineer, Frederick C. Kunz. He worked on the Queensboro Bridge across the East River in New York, and in 1908 he was retained to aid in the investigation of the collapse of

the cantilever bridge across the St. Lawrence River at Quebec. From 1909 to 1912, Mr. Ammann worked for Frederick C. Kunz and C. C. Schneider in Philadelphia and designed an arch bridge over the St. John River in New Brunswick, Canada, as well as a plan for the construction of the Quebec Bridge. From 1912 to 1923 he was with Gustav Lindenthal, a famed bridge engineer, working on the design and construction of the record-breaking Hell Gate Bridge, with its three miles of approach via ducts.

Continuing his earlier interest in a span over the lower Hudson River, Mr. Ammann submitted proposals for a structure farther north between Fort Lee, New Jersey, and upper Manhattan, New York. In 1923 he established his own practice and saw the authorization by the two states of the bridge that is now the George Washington Bridge. Mr. Ammann was then named as the first Chief Bridge Engineer, and later Chief Engineer and Director of Engineering for the Port of New York Authority, which was authorized to finance and execute the project. The bridge was opened in 1931, with a center span of 3,500 feet. In 1962, a second deck, provisions for which were included in the original plans, was completed, increasing the bridge capacity from eight to fourteen lanes. This bridge always ranked as Mr. Ammann's favorite, even though it was not the largest of his projects.

In 1934 the Triborough Bridge Authority was established, and Mr. Ammann was named its Chief Engineer. Thus, in his capacities with both the Port Authority and the Triborough Bridge Authority, Mr. Ammann was also in charge of planning and construction of such additional projects as the Outerbridge Crossing and the Goethals Bridge across Arthur Kill; the arch bridge across Kill Van Kull at Bayonne, New Jersey; the Lincoln Tunnel under the Hudson River; the Triborough Bridge; and the Bronx-Whitestone Bridge.

Mr. Ammann retired in 1939 to open his own consulting office, acting as bridge consultant on a number of large projects. He entered into partnership with Charles S. Whitney in 1946 to form the firm of Ammann & Whitney, which has attained a staff of about 500. The firm was retained by the Triborough Bridge and Tunnel Authority and the Port Authority on a large arterial program that

included the building of the Throgs Neck Bridge, the double-decking of the George Washington Bridge, and, finally the construction of the Verrazano-Narrows Bridge between Brooklyn and Staten Island, the last marking the culmination of Mr. Ammann's brilliant career. It opened in 1964 and had a span 760 feet (or 22 percent) greater than the George Washington Bridge, and 60 feet longer than the Golden Gate Bridge.

Mr. Ammann received many professional honors, including the following honorary degrees: Doctor of Technical Sciences from the Swiss Federal Institute of Technology, Doctor of Engineering from New York University, Master of Science from Yale University, Doctor of Engineering from Pennsylvania Military Academy, Doctor of Science from Columbia University, Doctor of Science from Brooklyn Polytechnic Institute, and Doctor of Science from Fordham University.

In 1965 Mr. Ammann received the National Medal of Science from President Johnson in a ceremony at the White House "in recognition of outstanding contributions to the engineering sciences." He also received the Port Authority's Howard S. Cullman Distinguished Service Medal and the first Award of Merit from the Institute of Consulting Engineers. He was elected to Honorary Membership in the American Society of Civil Engineers in 1953.

Mr. Ammann is survived by his wife, the former Klary Noetzli, and his three children, Werner, George Andrew, and Margot. He will be remembered by all who knew him for his personal attributes of gentle modesty and inspiring humility, which were in marked contrast to the mighty structures he built. He displayed a deep affection for his associates and a marked seriousness and enthusiasm for his work. His many technical contributions are characterized by a progressive approach to engineering principles and are matched by his awesome contributions to the aesthetics and beauty of large bridge structures.