



Solomon C. Haicista

SOLOMON CADY HOLLISTER

1891-1982

BY RICHARD N. WHITE

SOLOMON CADY HOLLISTER, retired Dean of Engineering and Professor Emeritus of Civil and Environmental Engineering at Cornell University, died on July 6, 1982, at the age of ninety. Dean Hollister's remarkable career as an engineer and educator spanned more than six decades. Among his many contributions to American engineering were pioneering developments in structural welding and in concrete technology. As an educator and administrator, his career showed bold innovation, with continuous emphasis on the needs of the engineering profession and how the engineering curriculum should respond to these needs.

Solomon C. Hollister was born in Crystal Falls, Michigan, on August 4, 1891, and grew up in the Pacific Northwest. He enrolled at Washington State University in 1909 and worked his way through college, taking considerable time off to earn money as a surveyor and engineer. He transferred to the University of Wisconsin, where he completed his final year and a half and received the Bachelor of Science degree in 1916 (and later, in 1932, the Civil Engineering degree). He entered engineering practice in 1916 and also taught at the University of Illinois for one year.

In 1918, at the age of twenty-six, he was appointed Chief Designer and Head of the Research Branch of the Concrete Ship Section of the U.S. Shipping Board. In this capacity he was responsible for several major innovations in reinforced concrete that led to the construction of the world's first practical seagoing concrete ves-

sels. In the 1920s he had a consulting practice in Philadelphia, designing mainly in reinforced concrete; in 1929 he received the first Wason Research Medal from the American Concrete Institute (ACI) for his innovative design, construction, and testing of a skew-arch bridge built in Chester, Pennsylvania. His other contributions to concrete technology included development of transit-mixed concrete and being a leader in developing standard specifications that helped evolve this engineering area from empiricism to structural science.

Dean Hollister had a major role in the design of the 30-foot-diameter welded steel penstocks for Hoover Dam. Through his extensive research and consulting activities, he helped produce many advanced designs for welded steel bridges, boilers, and pressure vessels.

After four years on the faculty at Purdue University, Solomon Hollister came to Cornell as Professor and Director of the School of Civil Engineering in 1934. He became Associate Dean and then Dean of the College of Engineering in 1937, a position he held for twenty-two years, until his retirement in 1959. He physically and intellectually rebuilt the College of Engineering and thrust Cornell into the top echelons of engineering education in the United States. One major step he initiated was to move the college into a five-year undergraduate curriculum, strengthening scientific course content as well as the engineering design and liberal arts electives. He brought the School of Chemical Engineering into the college and initiated a new School of Engineering Physics and a Graduate School of Aeronautical Engineering.

Much of his work in strengthening engineering education at the national level was done through his chairmanship of various committees of the Engineers' Joint Council for Professional Development. While leading the American Society for Engineering Education (ASEE), he established a committee that in 1955 produced a major study, known as the Grinter Report, which outlined future innovations in engineering education.

As a development officer at Cornell, Solomon Hollister was an outstanding success; he raised funds to build an entire new engineering campus during his tenure as Dean of Engineering. For a period

after World War II he was Vice-President of Development as well as Dean. After his retirement in 1959, he maintained an active role in professional and educational affairs, particularly at Cornell as a University Trustee (1959-1964) and as a member of the Engineering College Council until his death.

Dean Hollister had a unique capability to undertake difficult problems that impacted on the public sector. This breadth of interest and capability was recognized by requests for his assistance throughout his life, such as service on the Second Hoover Commission on the reorganization of the Executive Branch of the U.S. Government; chairmanship of the Board of Consultants on the Isthmian Canal Study; member of a Defense Department committee of business and scientific leaders to advise the National Security Council on defense systems; and a member of the Steering Committee for the study of Africa south of the Sahara undertaken by the National Academy of Sciences. He also served as a member of many other professional and public commissions, giving freely of his precious time for these important national activities. Of these experiences, he especially treasured the friendship he developed with Herbert Hoover during and after their work on the Second Commission. He admired Hoover particularly as an engineer-become-public-servant. The admiration was reciprocal; as Hoover wrote for an event honoring Solomon Hollister, "He is a great engineer, he is a superb teacher, and he knows more about our government than any engineer I know."

Solomon Hollister was elected to the National Academy of Engineering in 1973. He was also named to the Hall of Fame of Engineering Education of the ASEE. He served as President of the American Concrete Institute in the early 1930s, President of ASEE in 1951, and was the recipient of the Lamme Award of ASEE in 1952.

Solomon Hollister was awarded honorary Doctor of Engineering degrees from Stevens Institute of Technology, Purdue University, and Lehigh University, and an honorary Doctor of Science degree from the University of Wisconsin. He was elected to honorary membership in no fewer than six national professional societies: American Society of Civil Engineers, American Society for Mechanical

Engineers, American Concrete Institute, American Institute of Architects, American Society for Engineering Education, and American Association for the Advancement of Science. To be so honored by civil engineers, mechanical engineers, and architects reflects the unique breadth of this man. He received the Turner Medal of ACI in 1979, and his last award came in the spring of 1982, when he received Washington State University's Alumni Achievement Award for "brilliance and boldness in pioneering the field of reinforced concrete, and in bringing prominence to his profession."

Dean Hollister contributed articles to several handbooks and texts and wrote many technical papers and articles on structural mechanics, structural engineering, construction materials, and educational matters. He consulted with numerous companies and was a Director of Raymond International, Inc. In one of his many and varied hobbies, paleontology, he achieved professional status. He was a Research Associate and President of the Paleontological Research Institute in Ithaca and contributed scientific papers and one book to the literature of this field.

Solomon Cady Hollister was a famous man, a distinguished man, a good man, a man of great achievements; to those who knew him well, he was a Renaissance man. He was an artist, a paleontologist, a musician, an analyst, an avid reader and collector of rare books, a creative designer, a visionary educator, a most effective promoter, and a great engineer of truly uncommon breadth. We have lost a good friend and a patient adviser.

Dean Hollister is survived by Ada, his wife of sixty-three years; by three children, ten grandchildren, and six great-grandchildren.

