## **ENGINEERING ECONOMY PIONEERS**(John Charles Launsbury Fish)

## Gerald J. Thuesen Georgia Institute of Technology

John C.L. Fish provided the important bridge between the pioneering effort of Arthur Wellington in his engineering economy work of the 1870's and the first publication of the <a href="Principles of Engineering Economy">Principles of Engineering Economy</a> in 1930 by Eugene L. Grant. The development of the field of engineering economy over this 50 year period was pivotal to the integration of economic analysis as a necessary element in engineering education. Eventually, the need for an economic perspective has become a routine part of the day-to-day engineering analysis utilized in today's competitive world.

- 1870 J.C.L. Fish born on June 3, 1870 in Huron County, Ohio, near Lake Erie.
- 1876 Land acquired by Leland Stanford (9000 acres).
- 1885 Attended two terms of "prep" at Oberlin College.
- 1885 Stanford founded.
- 1886 At age 16, Fish was offered the position of sole office helper to the City Civil Engineer in Sandusky, OH. (20,000 population) by his 30 year-old cousin.
- 1888 Began engineering study at Cornell University.
- 1891 Stanford University begins operations.
- 1892 Graduated from the school of Civil Engineering at Cornell University.
- 1893 Joins Stanford University on the faculty of Civil Engineering.
- 1894 Published Lettering of Working Drawings, New York: D. Van Nostrand Co., 1894.
- 1913 Published <u>Earth Work Haul and Overhaul Including Economic Distribution</u>, New York: John Wiley and Sons, 1913.
- 1915 Published <u>Engineering Economics First Principles</u>, New York: McGraw Hill Book Company, Inc., 1915 (Leading text for 20 years.).

- 1917 Published with W.W. Losing, <u>Technic of Surveying Instruments and Methods, 1st ed.</u>, New York: John Wiley and Sons, 1917.
- Published <u>Engineering Economics First Principles, 2nd ed.</u>, New York: McGraw Hill Book Company, Inc., 1923.
- 1928 Became Head of the Civil Engineering Department at Stanford University.
- Eugene L. Grant arrived at Stanford University as a new faculty member in Civil Engineering.
- 1935 Retired in 1935.
- 1941 Published with T.J. Hoover, <u>The Engineering Profession</u>, Stanford, CA: Stanford Press, 1941.
- 1950 Published The Engineering Method, Stanford, CA: Stanford Press, 1950.
- 1962 Died in Santa Monica, California on June 15, 1962 at the age of 92. Survived by his son Lounsbury S. Fish and his daughter Francis Fish Young.
- 1. Department of Civil Engineering Stanford University. One Hundred Years of Civil Engineering at Stanford, A Retrospective, 1991.
- 2. Fish, J.C.L., Letter to R.R. Bradley, Department of Special Collections, Stanford University Libraries, Stanford, CA, July 20, 1957.
- 3. Hoover, T.J. and J.C.L. Fish, The Engineering Profession, 2nd ed., Stanford CA: Stanford University Press, 1950.
- 4. Williams, H.A., C.H. Oglesby and F.E. Terman, <u>Memorial Resolution Professor Emeritus John C.L. Fish; 1870-</u>1962, Department of Special Collections, Stanford University Libraries, 1962

## GERALD J. THUESEN

Gerald J. Thuesen is Professor Emeritus in the School of Industrial and Systems Engineering at the Georgia Institute of Technology. He received his B.S., M.S. and Ph.D. in Industrial Engineering from Stanford University. His research interest include engineering economic analysis, capital budgeting and statistical decision theory. He has co-authored two college texts, Engineering Economy and Economic Decision Analysis. He served from 1981-1991 as Editor of The Engineering Economist and is a Fellow of the American Society for Engineering Education, where he was a member of the Board of Directors. Dr. Thuesen was recipient of the Eugene Grant Award in 1977 and 1989, and he received the Wellington Award in 1989 for outstanding contributions and service to the field of engineering economy. In 1990 he received the Outstanding Publication Award from IIE. He is a Fellow of the Institute of Industrial Engineer, where he served as a member of the Board of Trustees.