

Clesson Nathan Turner

September 17, 1908 — October 27, 2001

Clesson Turner was a major force in the field of Agricultural Engineering for more than 33 years. From 1931-68, he contributed to many areas of engineering and technology in agriculture in New York State and beyond.

Clesson Nathan Turner was born in Sodus, New York on September 17, 1908. Following graduation from Sodus High School in 1927, he attended the University of Rochester for two years, and obtained a B.S. degree from Cornell University in 1931. After serving as Extension Agricultural Engineer in Maine for four years, Clesson joined the Cornell Agricultural Engineering staff in November 1935 as an Assistant Professor.

During his first four years at Cornell, he took the time to study for his Master of Science degree that he received from Ohio State University in 1939. His thesis project was the study of erosive wear of stray nozzles discs. His work resulted in a manufacturer redesigning a spray discs that gave better performance and an increased life of five times.

He was Extension Project Leader for Agricultural Engineering from 1939-44. At this time, he was the key person responsible for the War Emergency Farm Machinery Repair Program (World War II). He was also active in establishing, equipping and directing the operation of custom potato spray rigs during the war. As Extension Specialist, he was called upon to use his broad knowledge to conduct many types of programs and “schools” such as tractor and field machinery repair and adjustment, potato and fruit sprayer maintenance and use, electric wiring, and dairy barn and poultry house ventilation.

Clesson Turner was instrumental in organizing the New York State Farm Electrification Council in 1943, supported almost entirely by investor-owned electric companies in the state. He was appointed its first Project Leader and served as Project Leader for 20 years until 1964. In this capacity, he made numerous research and extension contributions to the application of electricity to agriculture. Clesson was appointed Associate Professor in July 1945, and Professor in July 1950.

Clesson’s research studies and investigations led to better design and means of operating adjustments of potato diggers to minimize bruising in digging, design of barn hay driers, electric water heaters, and standby generators for emergency service on farms. In the early 1950s, he studied and tested various designs of bulk milk coolers that would replace milk can coolers on dairy farms. These studies were influential in future designs of bulk milk

coolers. He was also instrumental in developing recommendations for sizing and type used, and specification for adequate controls for the coolers.

In 1959, Paul Sturges and Professor Turner started the development of the equipment to recover waste heat from the refrigeration system on milk coolers and use that heat to preheat water in the milk house. Clesson conducted some of this investigation in the early 1960s at the National Institute for Research in Dairying at the University of Reading. This process was a forerunner to today's heat pump; removing heat from milk and using that heat to warm water. Today this process is common in agriculture, industry and in some residences.

Clesson Turner may be best known among his colleagues in Agricultural Engineering at home and abroad, and by the people of New York State, for his life-long work on Cornell's environmental control system for livestock housing. The work of Professors Turner and William Millier, dealing with negative pressure ventilation systems and the slot-inlet, led to revolutionary changes in the ventilation of livestock housing.

Most of his research studies and contributions over 20 years were documented in the Annual Progress Report of the Farm Electrification Council. Two booklets authored by Clesson, *Farm Electric Equipment Handbook* and *Wiring Specifications for Electrical Farm Equipment*, were used by power companies, electric equipment manufacturers and vocational schools. His contributions also appeared in over 250 technical and research articles, leaflets, bulletins and popular articles. While on leave from Cornell in 1961-62, he was adviser to the United States delegation to the United Nations Rural Electrification Conference in Geneva, Switzerland.

An avid collector of antique clocks, Clesson was a member of the National Association of Watch and Clock Collectors. After retirement in December 1968, when he was named Professor Emeritus, his interest in old clocks continued—owning some 40 Ithaca Calendar (perpetual) and Poole clocks. He was a charter member of Chapter 55 of the National Association of Watch and Clock Collectors. He also had an interest in cars having five Hondas, two Toyotas, and a MG midget.

Clesson and his wife, the former Elizabeth Dukes, of Denver, Indiana, were married in 1934. They had two daughters, Ann and Jean. After retirement, Clesson and Elizabeth lived in Interlaken until 1992 when they moved to Gig Harbor, Washington. Clesson and Elizabeth had been married 65 years when Elizabeth died in August 1999. Clesson Turner passed away October 27, 2001.

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