

NECROLOGY

WILL E. EDINGTON, DePauw University

HARRY FREDERIC DIETZ

Indianapolis, Indiana
December 8, 1890

Chadds Ford, Pennsylvania
September 4, 1954

In this day of high scientific specialization it is refreshing to know that there are still a few scholars and a few naturalists. Indiana has been fortunate in being at one time the home of some of America's great naturalists. Thomas Say, who came to Indiana in 1826 as a part of the New Harmony experiment and spent the remainder of his life in Indiana, was an all around naturalist who became known as the "Father of American Entomology." Probably two of the best known Indiana naturalists were David Starr Jordan and Willis S. Blatchley, both very prominent in the first quarter of this century. But the rugged competition and high specialization required today for scientific leadership leaves few men with the energy and time to achieve distinction as naturalists or scholars. However, Harry Frederic Dietz was no ordinary scientist, for he was an avid student of nature. Recognized nationally as an entomologist, he also had a wide knowledge of plant pathology, plant ecology and plant culture. "He loved, appreciated, and understood nature as an entity and not as a series of compartmented specialties."

Harry F. Dietz was born in Indianapolis on December 8, 1890, and spent his boyhood and early manhood there. Following his graduation from Shortridge High School he became an assistant, in 1909, in the office of the Indiana State Entomologist. He also entered Butler University and five years later received the Bachelor of Arts degree. During this period, however, he was for a time a student assistant in entomology at the Montana Experiment Station at Bozeman, Montana. From 1914 to 1916 he was Indiana Deputy State Entomologist and during these two years he collaborated with Harold Morrison, then in the State Entomologist's office, in a study that later led to the publication of an outstanding joint taxonomic paper on "The Coccidae of Indiana." Then followed four years of service as an entomological inspector in the Federal Horticultural Board and Bureau of Entomology in the U. S. Department of Agriculture with headquarters in Washington, D. C. In 1920 he returned to Indiana as Assistant State Entomologist in the State Department of Conservation.

He had joined the Indiana Academy of Science in 1909, at the age of nineteen, and having become a member of the American Association for the Advancement of Science in 1917 and a Fellow three years later, on his return to Indiana he entered enthusiastically in the work of the Academy. He was interested in getting an Index for the Proceedings and he and John S. Wright were appointed in 1921 as a committee to consider the problem. In 1922 he was made a Fellow of the Academy and the

following year was elected Press Secretary and served for the next six years. From 1924 to 1929 he was chairman of the Academy Committee on Biological Survey and a member of the Committee on the State Library. He presented three papers on the termites of Indiana, two of which were published in the Proceedings for 1920 and 1923.

Feeling the need of further scientific training he resigned in 1929 as Assistant State Entomologist and began graduate study at the Ohio Experiment Station of Ohio State University at Wooster, Ohio, as a Crop Protection Institute Fellow in entomology and received the Master of Arts degree in 1930. The following year he was a Grasselli Fellow in entomology and the Ph.D. degree was conferred on him in 1931. He remained at the Ohio Experiment Station and in 1932 was made a research entomologist of the Grasselli Chemical Company, a subsidiary of the E. I. du Pont de Nemours and Company, and carried on insecticide investigations in cooperation with the Ohio Experiment Station until 1936, when he went to Wilmington, Delaware, to work on pest control research in the Du Pont Experimental Station. He became a group leader in 1948 and was promoted to manager of the Agricultural Chemicals Section in 1949, which position he held until his sudden death from heart attack on September 4, 1954.

Dr. Dietz possessed seemingly boundless energy and his brilliant and inquiring mind coupled with a fine personality enabled him to work effectively with others in research. His extensive knowledge of field conditions and the life history of injurious insects and plant diseases was of utmost importance in the development of new agricultural chemicals, and among the many new pest control products that he helped to establish are "Copper A, dithiocarbamates, 'Lorol,' DDT, methoxychlor, BHC, 'Ammate,' and 2,4-D."

Among his many publications on entomology were studies on scale insects and termites of Indiana; termites of Panama and the Canal Zone; blackfly of citrus; insects and diseases of greenhouse and ornamental plants; and apple, peach and vegetable insects.

In addition to societies already mentioned, Dr. Dietz was a Fellow of the Ohio Academy of Science and a member of the Entomological Society, Sigma Xi, Gamma Sigma Delta honor agricultural society, and Phi Delta Theta social fraternity.

Dr. Dietz had a deep interest in nature and he pursued horticulture as a hobby. He was especially interested in growing iris, peonies, lilies and azaleas, and he was an authority on the growing of a number of ornamentals. At one time he was much interested in rose culture.

Harry Dietz lived a full and effective life and he rendered genuine service to science and to humanity.

KARL BOYER MCEACHRON

Hoosick Falls, New York
November 17, 1889

Pittsfield, Massachusetts
June 24, 1954

Some thirty years ago on the north campus of Purdue University one saw a row of seventy-foot steel towers from which hung nests of insulators

on which were strung metal cables whose distance apart could be varied from eighteen feet to thirty-eight feet. By means of large condensers and the use of all the power available on the campus a current of some thousands of amperes with a voltage as high as 600 kilovolts could be sent through these cables which then became surrounded throughout their full length by electrical discharges known as corona, and the Electrical Experiment Station was studying the losses through this corona on high voltage transmission lines and determining the reliability of insulator nests. Annually the Experiment Station held "Open House" and one of the spectacular displays was lightning discharges whereby blocks of wood were shattered and the surrounding air made pungent with ozone created by the ionization of the air by the electrical discharges. These studies had begun in a more modest way several years earlier and had led to some valuable results in obtaining nitrogen from the atmosphere and new methods of extracting ozone for commercial purposes. These earlier researches were under the direction of C. Francis Harding, Head of the School of Electrical Engineering, and were carried out by Karl Boyer McEachron whose outstanding success led to his appointment in 1922 as a research engineer by General Electric Company, with laboratories at Pittsfield, Massachusetts.

Dr. McEachron had come to Purdue in 1918 as an assistant engineer in the Electrical Engineering Experiment Station and two years later he was promoted to Research Associate. During this time he earned the Master of Science degree in Electrical Engineering at Purdue. A graduate of Ohio Northern University in 1912 with a degree in electrical engineering, he continued his study there for another year and received the Master of Engineering degree. The following year he spent with the General Electric Company as a student engineer on a test course. Completing his training in this test course, he returned to Ohio Northern, in 1914, as an instructor in electrical engineering and remained there until he received his appointment to Purdue in 1918. In 1922 he returned to the General Electric Company to take charge of the research and development section of Lightning Arrester Engineering Development at Pittsfield, Mass. At this time F. W. Peek, Jr., was carrying out his spectacular high voltage researches at Pittsfield and he had succeeded in building up a controlled voltage of 2,000,000 volts, at that time, 1923, the highest controlled voltage ever worked with in electrical engineering. During the next ten years Dr. McEachron did much pioneering in lightning and high voltage engineering and in 1933 he was appointed engineer in charge of the High Voltage Engineering Laboratory. In 1940 he was also appointed designing engineer of the Power Transformer Division. He became assistant works engineer in 1945 and he was named assistant manager of engineering, Transformer and Allied Products Divisions, in 1947 and manager two years later. He received the appointment of manager of the Laboratory-Engineering Department in 1952 and the following year was appointed consultant — professional employee relations — technical, Engineering Services Division, which position he held at the time of his death on June 24, 1954. He had been in poor health for some time but he was hospitalized

only six days before his death. He was born in Hoosick Falls, New York, on November 17, 1889.

During these thirty-two years at Pittsfield he had become an international authority on lightning and high voltage engineering. Under his direction was built a 10,000,000 volt artificial lightning generator, duplicates of which were used in creating crashing lightning bolts at the New York World's Fair. In 1950 new developments led to the construction of a new High Voltage Laboratory with a generator capable of producing 15,000,000 volts and giving a lightning flash over a fifty-foot gap. He also originated and supervised a program that photographed and measured the strength of natural lightning bolts that struck the Empire State Building in New York City.

As one would expect, Dr. McEachron received many honors. In 1931 he was presented the Charles A. Coffin Award for his development of thyrite. The Edward Longstreth Medal of the Franklin Institute was given to him in 1935, and in 1949 he received the Edison Medal presented by the American Institute of Electrical Engineers. In 1952 he was honored with eminent membership in Eta Kappa Nu, national electrical engineering society, and the New England Award of the Engineering Societies of New England. He received his last honor in the summer of 1953 when he was elected an honorary member of the Societe Francaise des Electriciens. Only a very few Americans have received this distinction. His Alma Mater, Ohio Northern, conferred the degree of Doctor of Engineering on him in 1938, and in 1948 Purdue University awarded him the honorary degree of Doctor of Science. He was listed in Who's Who in America and in American Men of Science.

As an expert on lightning he testified frequently before juries and Government committees on high voltage and lightning phenomena. He was the author of numerous scientific papers and he was co-author with K. G. Patrick of a book, *Playing With Lightning*, published in 1940. He also wrote "Lightning and Lightning Protection" for the *Encyclopedia Britannica*.

Dr. McEachron was a Fellow of the American Institute of Electrical Engineers, served on several of its committees, was a director from 1936 to 1940, and its vice-president from 1942 to 1944. He joined the Indiana Academy of Science in 1921, and was joint author of a paper that appeared in the *Proceedings* for 1921. He was a charter member of the Board of Registration of Professional Engineers for Massachusetts and served on this Board for ten years. He was a member of a Panel of the National Research and Development Board, Washington, D. C., from 1947 to 1949, and he also served on a subcommittee of the National Advisory Committee on Aeronautics from 1937 to 1946. During World War II he was chairman of an advisory committee on protection against lightning and static to the office of the Chief of Ordnance.

He made frequent trips around the country for the General Electric Company and fulfilled many speaking engagements in various cities. He was active in civic affairs in Pittsfield, having served as chairman of the Parking Meter Commission, a director of the Chamber of Commerce, and a member of the Tax Reform Association. He was also a member and a

director of Rotary in Pittsfield. Active in the Methodist Church, he taught a Men's Bible Class for seven years and a Married Couples' Class for nine years. Woodworking was his special hobby and he was a skilled amateur photographer, being much interested in motion pictures.

It is noteworthy that Dr. McEachron retained an abiding interest in Purdue University and the Indiana Academy of Science. His three sons became Purdue graduates and he maintained his membership in the Academy throughout the years after he left the State. His distinguished career has brought honor both to Purdue and the Academy.

FREDERICK LEVERNE SERVISS

Telluride, Colorado
July 30, 1895

West Lafayette, Indiana
July 22, 1954

At one time, before the State became so highly industrialized, Indiana's limestone industry played a very important role in the State's economy, and one of the problems confronting that industry was the staining of the stone by the cement and mortar used in building construction. Naturally the industry turned to the scientists at Purdue for help and one of the toughest problems that long baffled the old School of Chemical Engineering at Purdue was to determine just what caused the staining and how it could be prevented. Professor Harry C. Peffer, for many years Head of the School of Chemical Engineering, spent many hours experimenting with and testing various cements and mortars to which various ingredients had been added in the hope that the straining might be prevented without effecting the binding qualities of the cement. But it remained for Professor Frederick L. Serviss, who came to Purdue in the Fall of 1929, to solve the problem.

Professor Serviss was primarily a geologist. He was born in Telluride, Colorado, on July 30, 1895, in a region in the San Juan Mountains noted for its mining, and following the completion of his public school education he entered the Colorado School of Mines. He was a Fellow in Civil Engineering in his Senior year and received the degree of Engineer of Mines in 1920. Two years later he received the M.S. degree in geology. His first position was with the American Metals Company and a little later he worked for the Tonopah Placer Mining Company. Also for a time he was assistant city engineer in charge of waterworks and construction for the city of Trinidad, Colorado. He began doing consulting work in 1922 and continued this kind of work for the rest of his life. He was a consulting engineer for the Colorado Fuel and Iron Company, the Union Pacific Coal Company, and for many years after 1922, for the Utah Fuel Company.

In 1923 he left Colorado and went to Washington, D. C., as a part-time instructor in geology at the Catholic University of America. He remained in Washington six years and during this time, in addition to his teaching, he did some graduate study in science and economics at George Washington University. In 1925 he also became a consultant for Ruebsam and Stevens, of Washington, continuing this work until 1931.

Professor Serviss accepted a position at Purdue University in the Fall of 1929 as Associate Professor of Geology. He was promoted to

Professor in 1935 and in 1947 he was also made Chairman of the Division of Geology in the School of Chemical and Metallurgical Engineering. In addition to his teaching and administrative work he continued his consulting work. He became a consultant to the Indiana Limestone Company of Bedford in 1931 and this led to his outstanding success in finding a non-staining cement for limestone building construction. He also became a consultant on coal to the Western Division of the Pennsylvania Railroad Company in 1944.

Professor Serviss was an outstanding teacher. He kept his courses up to date by constant revision through his intensive and extensive reading of the pertinent current scientific literature. Also he strove to give his students a comprehensive knowledge of mineralogy and geology from both a technical and an economic point of view. He insisted on orderly work as well as orderly thinking and his laboratories were maintained with efficiency and order. He had the ability and the professional background to do productive research. However, owing to the death of his wife in 1941, leaving him with nine children to take care of, he devoted much of his time, not necessary to his teaching, administrative, committee, and consulting, to his family and he succeeded well in bringing them all safely to maturity before he passed away quietly in his sleep on July 22, 1954. However, he had published articles on metallic minerals; crystal growth; economic geology; and the political effect of mineral deposits of economic importance and their national significance.

He maintained membership in numerous scientific societies. He had been a member and Fellow of the American Association for the Advancement of Science since 1933, a Fellow of the American Geological Society, and a member of the American Institute of Mining and Metallurgical Engineers, the American Society of Civil Engineers, the Association of Petrological Geologists, the American Academy of Political and Social Science, the Academy of Political Science, the American Geophysical Union, and the New York Academy of Science. He was also affiliated with Sigma Xi, Tau Beta Pi, Pi Tau Sigma, Phi Lambda Upsilon, Sigma Gamma Epsilon, and Chi Epsilon, all honorary societies. He served as adviser to the Purdue Catalyst Club and the Purdue chapter of Sigma Gamma Epsilon. He was a registered engineer in the States of Indiana, Illinois and Colorado. As a citizen he was a member of the Board of Advisers of St. Francis Catholic High School in Lafayette. Professor Serviss was listed in *Who's Who in America* and in *American Men of Science*.

He joined the Indiana Academy of Science in 1938 and presented and published one paper on "Geophysics in Training a Geologist" in the Proceedings for 1938.

Professor Serviss was at heart a scholar. A devoted father and fine counselor of youth, a fine teacher and efficient administrator, his loss to Purdue and his community is great. Likewise, Industry has lost an excellent counselor and the State a good scientist and citizen.