

NECROLOGY

JOHN BRECKENRIDGE BURRIS

Putnam County, Indiana,
September 5, 1859.

Indianapolis, Indiana,
December 5, 1936.

John B. Burris spent the greater part of his life near Cloverdale, in the county in which he was born. He attended DePauw and Purdue Universities, receiving a degree from the latter in 1888. In 1899 he married Harriet McCoy, a graduate of DePauw University, who, with one daughter, survives him.

His major interest in the university was agriculture, and he followed that as his life work. He did educational work in farmers' institutes and was at one time president of the Indiana Corn Growers' Association. He traveled extensively, including one trip around the world.

As a charter member of the Academy, Mr. Burris was present and spoke at the Fiftieth Anniversary Meeting at Indianapolis in 1934. Although not active in the work of the Academy in later years, he was always keenly interested in scientific developments, particularly those applying to agriculture.—*Will E. Edington.*

HAL HERBERT COFFEL

Montpelier, Indiana,
February 2, 1875.

Pennville, Indiana,
August 24, 1936.

In H. H. Coffel we had a rare example of many-sided talent, his interests including banking, law, music, ornithology, forestry, and astronomy.

After receiving his formal education in Valparaiso University, the American Correspondence School of Law, and a music school in Chicago, he became president of a school of music in Indianapolis. In later years he was cashier, and then president, of the Pennville State Bank.

Mr. Coffel's publications include a number of musical works and a series of papers on birds. Articles on the birds and plants of Jay County were in preparation at the time of his death. He also gave illustrated popular lectures on ornithology and astronomy.—*Wm. J. Tinkle.*

SAMUEL DICKEN CONNER

Connersville, Indiana,
June 17, 1872.

Lafayette, Indiana,
April 19, 1936.

In the passing of Samuel D. Conner, science lost a keen student, the farmers of the State a wise counselor, and the Academy a well-known and valuable member.

Graduating from Purdue University in 1894, he spent a number of years with a sugar refinery in the South, and some time as a salesman for a fertilizer company, and returned to Purdue in 1899 as a member of the staff of the State Chemist. During the following years his success is indicated by the following appointments: Assistant Chemist in the

Agricultural Experiment Station, 1905; Associate Chemist, 1908; Instructor and Assistant Professor of Agricultural Chemistry in the School of Agriculture, 1906-1913; Associate in charge of chemical work in Agronomy, 1912; Research chemist in charge of the Research Chemistry Laboratory, 1923. He received the degree Master of Science in 1907.

Professor Conner's research dealt largely with the chemistry of soils. A pioneer in the study of soil acidity, he became a widely recognized authority in this field; his studies of muck and peat pointed the way to a profitable utilization of millions of acres of these defective soils. His discovery, in 1912, of aluminum toxicity and borax injury to corn under certain conditions, and his later work on the fixation by the soil of phosphate and potassium fertilizers and the placement of fertilizers for greatest efficiency, are noteworthy accomplishments.

He was an active member of a number of national and international societies devoted to chemistry and soil science.—A. T. Wiancko.

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AUGUST FREDERICK FOERSTE

Dayton, Ohio,
May 7, 1862.

Dayton, Ohio,
April 23, 1936.

Although a life-long resident of Ohio, Dr. August F. Foerste always had a lively interest in Indiana and Indiana geology. Little known to most members of the Academy, he was, nevertheless, one of its most distinguished members and was a frequent attendant at its meetings.

After attending the public schools of Dayton, he attended Denison

University, receiving the A. B. degree in 1887; Harvard University granted him the A. M. in 1888 and the Ph.D. in 1890, and Denison conferred the honorary doctorate of science upon him in 1927. He also studied at the University of Heidelberg and at the College de France in 1890-'92.

His scientific eminence was won in geology and paleontology, and he was by profession a teacher; but, strangely enough, he never, except incidentally, taught these subjects. The greater part of his teaching was in physics in the Steele High School of Dayton, where he taught from 1894 until his retirement in 1932.

Dr. Foerste's first scientific interest was in botany. At the age of fifteen, in company with William B. Werthner, well-known botanist and teacher in the Steele High School, he began to explore the countryside around Dayton for plants. His training in geology began under C. L. Herrick, at Denison, and was continued under the influence of Shaler, Davis, and Wolf, at Harvard, Alpheus Hyatt, of the Boston Society of Natural History, and Rosenbusch, Osann, La Croix, and Fouqué in Europe.

His first paper, on "The power of motion in crinoid stems", was published in 1884. His second publication, a series of papers (1885-'88) on "The Clinton group of Ohio", is significant because it established a life-long connection with the Bulletin of the Denison University Scientific Laboratories, a periodical whose fame was to be enhanced by the publication of many of his later papers; and it marked the beginning of his interest in the Silurian, an interest which reached its climax in a summary of the Silurian correlations of the Central States shortly before his death.

Dr. Foerste became connected with the Geological Survey of Ohio in 1892 and continued in that capacity until 1919, doing extensive field work on the Clinton (now Brassfield) group in Ohio. For three years (1896-'99), while connected with the Indiana Geological Survey under Dr. Blatchley, he made detailed studies of the Silurian and late Ordovician in southeastern Indiana, mapping with extreme accuracy the boundary between the two formations. He was always interested in the problem of the nature and age of the Cincinnati Arch and was one of the first to discuss the detailed relations of the various Silurian and Ordovician formations to this structure. From 1904 to 1912 he was connected with the Kentucky Geological Survey, and in 1911 and 1912 he served on the Canadian Geological Survey. From 1932 he spent all of his time at the United States National Museum as Associate in Paleontology, working on the collection of fossil cephalopods. His studies on the Ordovician and Silurian cephalopods during the last fifteen years of his life will stand for all time as a monument to his genius and one of the really great contributions to American paleontology.

His numerous papers will be found fully listed in the Bulletins on Geologic Literature of North America, published by the United States Geological Survey.—*Condensed from a manuscript submitted by E. R. Cummings.*

WILLIAM A. GUTHRIE

Dupont, Indiana,
May 13, 1851.

Dupont, Indiana,
August 5, 1936.

Through self-training in forestry during many years, William A. Guthrie became an authority on forest management. Living in and near woodlands during his entire life, he used the opportunity to secure first-hand an unusual balance between the theoretical and the practical in forestry.

His chief schooling was in Moores Hill (now Evansville) College. In 1875 he was married to Sarah Lewis, who died in Cairo, Egypt, in 1925. He was a member of many scientific and civic organizations, including the Indiana Academy of Science. Although not an active attendant at the meetings of the Academy, he was always interested in its welfare and advancement.

As a member of the State Legislature Mr. Guthrie initiated valuable legislation. He served for a number of years on the State Conservation Commission during the time when the acquisition of several of the state parks was consummated. His civic benefactions included a gift to the Nature Study Club of Indiana of a beautiful wooded area in Jennings County as a forest preserve in memory of his wife.

The "Guthrie Trail", leading from Madison up the hill, beneath the Hanging Rock, through his home town, and northward toward Indianapolis, was named in honor of his far-reaching services, and on his eighty-fifth birthday one of the entrances to Clifty Falls State Park was dedicated in his honor.—*Samuel E. Perkins III.*

JULIUS ARTHUR NIEUWLAND

Hansbeke, Belgium,
February 14, 1878.

Washington, D. C.,
June 11, 1936.

The accomplishments of genius have been variously ascribed to many different qualities. *Talent* and *industry* are, perhaps, most frequently mentioned; *courage* and *ambition*, too, are often stressed; *ingenuity* and *resourcefulness* seem to be necessary; and *a sense of humor* and *love of fellow beings* have inspired genius through all ages and placed men's names in the "Book of Gold."

The Reverend Julius Arthur Nieuwland, C.S.C., possessed all of these qualities in a high degree, and his bibliography attests his accomplishments. His untimely death occurred in Washington, D. C., where he was visiting the chemical laboratories of his Alma Mater. His final resting-place is in the cemetery of the Congregation of the Holy Cross, at the University of Notre Dame, where he spent all of his teaching days, 1904-1936, in the fields of botany and chemistry. He came to South Bend, Indiana, with his parents at the age of four. There he attended the parochial school of St. Mary's Parish. He received his preparatory training for the priesthood at Notre Dame and graduated there from the University in 1899. In December, 1903, he was ordained a priest of the Congregation of the Holy Cross by the late Cardinal Gibbons. He was granted the Ph.D. degree by the Catholic University of America in June, 1904, and was honored by the University of Notre

Dame with the degree Sc.D. in 1911. His major interest was in botany until 1918. He then became Professor of Organic Chemistry, but he retained the editorship of *The American Midland Naturalist*, which he had founded in 1909.

His taxonomic interests resulted in a fine collection of plants of northern Indiana, southern Michigan, New Jersey, Maryland, and Oregon. This and the splendid collection of the late Dr. Edward Lee Greene, his former teacher and friend, constitute the valuable herbaria at the University of Notre Dame. His remarkable knowledge of languages greatly aided him in his worth-while studies in the history of botany, and his interest in this field inspired him in his efforts to accumulate the great botanical library of the University. In connection with the earlier volumes of the *Midland Naturalist* he also edited the well-known series of rare and classical works of *Natural History*.

As a chemist, Father Nieuwland won fame primarily with his substantial contributions to the development of the chemistry of acetylene. Lewisite, a war gas, and Duprene, the most important synthetic rubber at present, are the best known products of his chemical activities. A large number of patents were granted him, both in the United States and in foreign countries, and both scientific and industrial organizations recognized his researches. Gold medals were awarded him by the International Acetylene Association, the Institute of the City of New York, the New York section of the American Chemical Society, and Villanova College. He was councilor of the American Chemical Society and secretary and chairman of its Organic Division. He was also a member of the board of editors of the *Journal of Organic Chemistry*.

His university duties involved many responsibilities. He was curator of the university herbarium, served as librarian of the botanical library, and was dean of the College of Science from 1918 to 1922 and director of research in organic chemistry from the early twenties to the time of his death. His interest in the Indiana Academy of Science was strong, and he served as its president in 1934. He combined a rare sense of the practical with his idealism for science and education, as is witnessed by the physical monuments which he left for posterity. His warm personality made him a host of friends, to whom he was an inspiration, and who, in turn, inspired him to greater accomplishments. Fellow members of the Indiana Academy of Science, the American Chemical Society, and other scientific societies, as well as his colleagues of the University of Notre Dame, feel his loss keenly and will long hold dear the memory of the priest-scientist of Indiana.—*H. B. Froning*.

(For Dr. Nieuwland's complete bibliography, see the *American Midland Naturalist* 17(4): i-xv. 1936.)

OTIS SIDNEY ROBERTS

Fairbury, Illinois,
August 19, 1862.

West Lafayette, Indiana,
December 19, 1935.

Otis Sidney Roberts received his early education in the public schools of Oxford, Indiana, and later entered the School of Science of Purdue University, receiving the degree, Bachelor of Science, in 1883. As a student in chemistry he developed a close friendship with his

teacher, Harvey W. Wiley. Following graduation he managed a farm for four years, taught in the local district school, and was superintendent of schools at Boswell (1886-1893), Otterbein (1893-1904), and Earl Park (1904-1907).

He returned to Purdue in September, 1907, and served as Inspector in the State Chemist Department until 1910, when he was appointed Chief Inspector, with the rank of Assistant Professor. He served in this capacity until his death, and also as Acting State Chemist from 1925 to 1926.

Beginning his career as inspector in the State Chemist Department a few months after the passage of the State Feeding Stuffs Control Law, Professor Roberts was a pioneer in this new field of work. His sincere, thorough, painstaking, and untiring efforts in the development of the inspection work are, in a large measure, responsible for the enviable position which Indiana has attained among the states having statutes regulating the sale of fertilizers, feeding stuffs, and seeds.

He served on committees of the American Association of Feed Control Officials and cooperated in studies in methods of sampling which are the foundation of the present official methods of sampling feeding stuffs. He was granted a leave of absence upon request of the officials of the State of Illinois for the purpose of instructing their staff of inspectors. For his excellent services in this work he received high commendation. During the period of the war, when farmers suffered injury to their crops from the presence of borax in fertilizers, he made extensive field inspections with representatives of the manufacturers and was instrumental in arranging adjustments satisfactory to both the farmers and the manufacturers without court action. Professor Roberts measured success, not in terms of accumulation of material wealth, but in service. He was a generous contributor to charitable causes. His chief interest was his work. His success was due largely to the intense enthusiasm, loyalty, sincerity, fairness, and thoroughness with which he performed his duties. He was firm and courageous in his convictions, but those with whom he dealt were always impressed with his honesty and sincerity.—*Henry R. Kraybill.*

GEORGE SPITZER

Galion, Ohio,
November 30, 1859.

West Lafayette, Indiana,
February 27, 1936.

The death of George Spitzer, Dairy Chemist at the Purdue University Agricultural Experiment Station, removed from membership in the Indiana Academy of Science one whose life typified the truly scholarly and scientific attitude. At the age of eleven he moved with his parents to a farm in Huntington County, Indiana. He was graduated with honors from the Lima, Ohio, High School in 1880, attended Kenyon College two years, and then entered Purdue University. After receiving a degree in pharmacy, he became Associate Professor and later Professor of Pharmacy. In 1907 he was appointed Dairy Chemist in the Experiment Station, and he held this position until his death. He received the degree Bachelor of Science from Purdue University in 1910 and at various times did graduate work in the University of

Chicago. Purdue University conferred the honorary doctorate of science on him in 1929.

Professor Spitzer made many valuable contributions to the science of dairy chemistry. For many years his work was centered in the chemical composition, moisture content, and keeping qualities of butter. He was among the first to give attention to the part played by enzymes and proteolytic organisms in the deterioration of butter.

His interest in the welfare of Purdue University was exemplified by his stimulating contacts with the School of Pharmacy, long after he ceased to be formally connected with it, and by the time which he gave unsparingly to research and graduate study and to the development of the physical plant.

He was a keen observer of plant behavior and a lover of flowers. He did a great deal of work in hybridizing and selecting varieties of flowers, and his extensive peony and iris gardens attracted wide attention.—*Henry R. Kraybill.*

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different pH values and the effects of sodium chloride. I. Bacteria Ichthyosmius. (With E. H. Parfitt.) Read at the Amer. Dairy Sci. Assoc. 1930—*The bacterial proteolytic enzymes: Their activity at different pH values and the effect of sodium chloride.* (With E. H. Parfitt.) Jour. Bact. 19:12. 1931—*Preliminary studies on the enzymes of Gibberella Saubinettii.* (With M. M. Diehm.) Jour. Agr. Res. 43:223-229. 1933—*A study of the action of proteolytic enzymes of specific organisms upon the proteins of milk and upon gelatin.* (With others.) Purdue Agr. Expt. Sta. Bull. 385. 1935—*Relation of the proteolytic enzyme activity to the proteolytic organisms found in separator slime.* (With E. H. Parfitt.) Jour. Dairy Sci. 18:267-272. *Study of the lipolytic enzymes of three specific organisms.* (With E. H. Parfitt.) Jour. Bact. 29:69.

ETTA S. WILSON

Leelenau County, Michigan,
July 16, 1857.

Detroit, Michigan,
January 5, 1936.

Etta S. Wilson was born in a forest wilderness near Grand Traverse Bay, in Leelenau County, Michigan. Her father was the son of an Ottawa Indian chief, and her mother was Mary Jane Smith, daughter of a pioneer missionary. Such lineage and environment would most naturally lead to a love of the outdoors and to a keen observation of natural activities.

Mrs. Wilson made the most of an unusual opportunity to obtain first-hand knowledge of the roosting and nesting of the passenger pigeon, which was abundant about her home throughout the impressionistic years of youth. She has reported the activities of her father and his associates as pigeon hunters, and she continued to live in her birthplace long enough to see this race of avians entirely exterminated in the late eighties. (See *The Auk* 51:157-168. 1934.) She was, however, almost fifty years of age before she made a serious study of general ornithology.

Before this she worked for a number of years as a newspaper reporter and a writer of feature articles and stories for magazines. Her interesting experiences, growing out of her unusual ancestry and her opportunities for observation, caused her to be sought out for lectures. For a number of years she lived in Indianapolis, during which time she lectured for the National Association of Audubon Societies. She attended many meetings of the Indiana Academy of Science, where she made close friends.—*Samuel E. Perkins III.*

DAWSON DWIGHT VANOSDAL

Allensville, Indiana,
July 30, 1869.

Rushville, Indiana,
March 24, 1936.

Dawson D. VanOsdal was a member of a family which seems to have been characterized by an unusual interest in medicine. He, with his two brothers, followed their father in that profession, and his one sister became the wife of a physician.

After receiving an elementary and high school education in Switzerland County and at Edinburg, Indiana, he attended the Miami Medical College at Cincinnati. Immediately after his graduation, in 1894, he began the practice of medicine at Allensville, later moving to Rushville.

Long interested in archeology as a hobby, he became a member of the Academy soon after the formation of the archeological section. Al-

though in poor health, he attended his first and only Academy meeting at Crawfordsville in 1935.

On October 12, 1897, he married Jennie Gary, of Rush County, who, with two sons, survives him. He was a member of the Masonic Blue Lodge, Royal Arch Masons, Scottish Rite and Mystic Shrine, Odd Fellows, Knights of Pythias, Modern Woodmen, American Medical Association, and Indiana Academy of Science.—*Glenn A. Black.*

ALBERT B. REAGAN

Maxwell, Iowa,
January 22, 1871.

Salt Lake City, Utah,
May 30, 1936.

The death of Dr. Albert B. Reagan took from the ranks of the Academy a man who had spent many active years in a study of the details of the life of the North American Indian.

After receiving his elementary education in Iowa and training for a teacher's license in the Central State Teacher's College of Oklahoma, he taught school for several years in Iowa. He later received bachelor's degrees from Valparaiso and Indiana Universities, the master's degree from the latter, and the doctorate from Leland Stanford Jr. University. In 1899 he became connected with the United States Indian Service, a field of work in which he was engaged for more than thirty years. During the last two years of his life he served as special instructor in Brigham Young University.

Dr. Reagan's many years of active field work resulted in the publication of more than 500 papers, a number of them in the Proceedings of the Indiana Academy of Science. A few of these papers dealt with fossil plants and animals in the recovery of which he had assisted; but the greater part of his work was devoted to the folklore, tribal customs, and details of every-day living of the Indians with whom he associated.

He is survived by his widow, Otilia Adelaide Reese Reagan, and two brothers and two sisters.—*P. W.*