

NECROLOGY

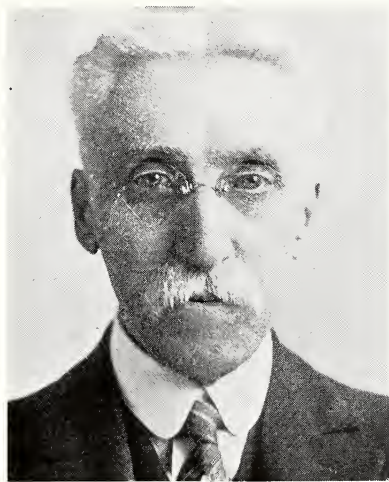
WILL E. EDINGTON, DePauw University

JOSEPH CHARLES ARTHUR

Lowville, New York
January 11, 1850

Brook, Indiana
April 30, 1942

Joseph Charles Arthur was one of Indiana's most distinguished scientists. Blessed with a long and active life, he early attained and maintained a leading place among the botanists of the United States, and became an international authority in his chosen field of research, the Uredinales, or plant rust fungi. At the time of his death he was the only member of the Purdue Faculty, and one of the very few Indiana scientists, ever elected to membership in the American Philosophical Society.



Dr. Arthur was born in New York but at the age of six years he moved to Iowa with his parents. He entered Iowa State College at its opening in 1869 and was a member of its first graduating class in 1872. This was the era of the founding of land grant colleges, and preceded the organization of agricultural experiment stations and state and national departments of agriculture as we now know them. Few colleges and universities then had well organized departments of botany. At Iowa State Dr. Arthur worked under Dr. Charles E. Bessey who directed his interests to applied botany which became his life's work. In his senior year at Iowa State he joined the American Association for the Advancement of Science, which at that time had a membership of 610, and

throughout the rest of his life he was active in its work and at the time of his passing he had held membership longer than any one else in the organization. In 1877 Dr. Arthur received the M.S. degree at Iowa State, and later continued his studies at Johns Hopkins, Harvard and Cornell universities, and in 1886 he received the first doctor's degree in science conferred by Cornell University.

As early as 1876 Dr. Arthur showed unusual ability in scientific research and won a major award for physiological apparatus exhibited at the Philadelphia Centennial Exposition. From 1879 to 1882 he taught botany at the Universities of Minnesota and Wisconsin, and in 1884 he was appointed research botanist at the newly founded Agricultural Experiment Station at Geneva, New York, being the first person in the United States to hold such a position. Here he performed pioneer scientific work on pear blight and other plant diseases which brought him national recognition. However, he had already begun his research on plant rusts before going to Geneva and had published the first of his 146 papers in that field in 1882. His last paper appeared fifty-four years later, in 1936. He came to Purdue University in 1887 as Professor of Botany, and in 1888 became the first Botanist in the Purdue Agricultural Experiment Station. He served as Head of the Department of Botany until his retirement in 1915 as Emeritus Professor of Botany, but he continued his research studies at the University and maintained close relations with Purdue until a few years before his death.

While Dr. Arthur's principal research dealt with rust fungi, he nevertheless did notable work in more general fields. He was one of the first to demonstrate that bacteria could cause diseases of plants, and his work with formaldehyde in the control of potato scab was of unusual scientific and economic importance. Also he continued his designs of physiological apparatus and received awards at the Columbian Exposition in 1893 and at the Century of Progress Exposition in 1932. Besides his numerous published research papers and memoirs, Dr. Arthur was joint author with Charles Reid Barnes and John M. Coulter of the celebrated ABC book on botany *Hand-Book of Plant Dissection*, joint author with D. T. MacDougall of *Living Plants and Their Properties*, and with a number of associates of volume seven of the *North American Flora* and *The Plant Rusts*. He was sole author of a *Manual of Rusts in the United States and Canada*. It is also of interest to note that Dr. Arthur in 1897 directed the thesis with the title "The Curvature of Roots," by Dr. D. T. MacDougall, for the first Doctor of Philosophy degree ever given at Purdue. Dr. Arthur taught only for a few years but nevertheless he trained a number of men in his laboratory who have become prominent botanists and plant physiologists. In his studies of the rusts he built up a herbarium containing over 60,000 specimens which is rich in type collections, culture material, notes, drawings and photographs. This herbarium is now the property of Purdue University and is known as the Arthur Herbarium. Because of his outstanding achievements the University of Iowa conferred the LL.D. on him in 1916, Iowa State College the Sc.D. in 1920, and Purdue the Sc.D. in 1931.

Dr. Arthur was well known personally to most of the botanists in this country and Europe. He spoke at the International Congress of Arts and Sciences at St. Louis in 1904, and he was a delegate to the International Congresses of Botanists that met in Vienna in 1905, in Brussels in 1910, and in Cambridge in 1930. In 1925 he made a special trip to Europe to confer with mycologists who were especially interested in rusts and he visited botanists in Germany, Sweden, Norway, Switzerland, and England. He was also active in various scientific organizations. In the American Association for the Advancement of Science he was secretary of section F in 1886, assistant general secretary in 1887, and a vice-president in 1895, a Fellow in 1883, and an emeritus life member in 1924. He was twice president of the Botanical Society of America, and president of the American Phytopathological Society. He also held memberships in a number of other American and foreign societies.

Dr. Arthur was a charter member of the Indiana Academy of Science and was its president in 1893. Throughout the greater part of his fifty-five years of residence in Indiana he was active in the work of the Academy and appeared numerous times on its programs. He was present at the Fiftieth Anniversary Meeting in 1934 in Indianapolis as an honored charter member of the Academy, and at the Purdue Meeting in 1938 both he and his long distinguished colleague Stanley Coulter were paid special tribute on the Academy program. The name of Joseph Charles Arthur now takes its place with the names of those other illustrious Hoosier scientists, David Starr Jordan, John C. Branner, Barton W. Evermann, John M. Coulter, Thomas C. Mendenhall, William A. Noyes, Willis S. Blatchley, and others, who brought honor and distinction to Indiana and the Academy of Science.

EDMUND SMITH CONKLIN

New Britain, Connecticut
April 19, 1884

Bloomington, Indiana
October 6, 1942

In 1934 Indiana University was seeking a head for its Department of Psychology and the choice was finally settled on Edmund Smith Conklin, one of America's leading psychologists, and a scientist noted for his research techniques and as a stimulator of research. Dr. Conklin came to Indiana from the University of Oregon where he had spent twenty-three years, first as an Assistant Professor of Psychology for two years and then as Professor and Head of the Department. He served also as acting dean of the Graduate School in 1922-1923.

Dr. Conklin graduated in 1908 from the Springfield, Massachusetts, Y.M.C.A. College and immediately entered Clark University. He received the master's degree in 1909 and then became a Fellow in Psychology and received the Ph.D. degree in 1911. That fall he went to the University of Oregon. In 1939 Clark University conferred the Sc.D. degree on him. Dr. Conklin served at various times as visiting professor at the University of Chicago and during his last summer at Syracuse University.

Dr. Conklin wrote numerous papers and monographs on genetic and abnormal psychology that stimulated much research. He was also the author of *Principles of Abnormal Psychology*, 1927; *Psychology of Religious Adjustment*, 1929; *Principles of Adolescent Psychology*, 1935; and he was joint author with F. S. Freeman, of Cornell University, of *Psychology for Students of Education*, 1939. He was also a member of the Editorial Board of the *Journal of Genetic Psychology*, *Genetic Psychology Monographs*, and the *Psychological Record*.

A Fellow of the American Association for the Advancement of Science and a member of the American Psychological Association, Dr. Conklin served as a representative of the latter organization on the National Research Council from 1939 to 1941. In 1938-1939 he was president of the Midwestern Psychological Association. He became active in the Indiana Academy of Science shortly after coming to Indiana University and he presented papers and served as chairman of the Psychology Division.

Dr. Conklin possessed a very pleasing and genial personality and was an excellent teacher, being concise and especially effective in his illustrative methods. His health became impaired about two years before his death but he continued his teaching duties until the end. His passing at the comparatively early age of fifty-eight years represents a real and distinct loss to science both in the state and the nation.

OLAF HOVDA

Dane County, Wisconsin
September 6, 1874

Henderson, Kentucky
September 7, 1942

With the death of Dr. Olaf Hovda, Evansville College lost the last member of the original Faculty which greeted its first students in 1919. An ardent devotee of golf he was stricken with a fatal heart attack while playing his favorite game.

Dr. Hovda was born in southern Wisconsin, of Norwegian parentage, and received his early education in a one-room country school. Later his family moved to Duluth, Minnesota, where he was enabled to do his preparatory college work so that he could enter the University of Minnesota. In 1904 he received the bachelor's degree with Phi Beta Kappa honors, mathematics and physics being his special interest. After teaching for several years in Fairmont, Minnesota, high school he returned to the University of Minnesota as an assistant in mathematics and physics and received the master's degree in 1911. He immediately went to Germany to study at the University of Göttingen where in 1913 the Ph.D. degree was conferred upon him.

Upon his return to the United States he became an instructor in mathematics at the University of Iowa, but in 1915 he went to Morning-side College as Head of the Department of Mathematics and Physics where he remained three years. Following a year of teaching at Carleton College, he came in 1919 to Evansville College as Head of the Department of Mathematics and Physics.

Dr. Hovda was the author of several research papers in physics but he preferred teaching to research. His teaching was characterized by considerable originality, for he possessed considerable inventive ability. He constructed much valuable apparatus such as a wind tunnel for the study of model airplanes in his aviation course, and he supervised the construction by his students of a miniature planetarium. He had been an instructor in CAA courses during his last three years. An inspiring teacher, and popular with both students and alumni, he was made honor guest at the annual alumni banquet two years before his death. He was also very well known around Evansville and advised and cooperated with a civic group in working out plans for smoke control.

He was a member of Phi Beta Kappa and Sigma Xi. He was a Fellow of the American Physical Society and a member of the American Association of Physics Teachers and the Indiana Society of Physics Teachers. Dr. Hovda regularly attended the meetings of the Academy. His death is a distinct loss to Evansville College and the Academy of Science.

JESSE G. LISTON

Clay County, Indiana
May 2, 1870

Clay County, Indiana
July 8, 1941

Jesse G. Liston was a teacher for forty years in the district schools of his home county. He was descended from a long line of pioneers, his paternal great grandfather having been a scout in William Henry Harrison's army and having plowed the first furrow in the wilderness where Terre Haute now stands. Another great grandfather was a Baptist minister who helped to establish what is now Louisville Seminary in Kentucky. After receiving his preliminary education in the public schools of his community, Mr. Liston entered Cooper College, now Sterling College, Sterling, Kansas, where he completed the four-year Normal Course. He then returned home and began his life's work.

Always deeply interested in the science of geology he became an authority on the geological formations of Clay and adjoining counties. He knew and had records of the formations in every drill hole and rock outcrop, and even of most of the wells, for a radius of thirty or forty miles from his home. He knew the coal strata and he built up a detailed stratigraphic sequence of the formations in his section of the state. He was frequently consulted by geologists who were interested in his region of southwestern Indiana. He was a studious and widely read man.

But Jesse G. Liston was first of all a teacher and he loved his pupils who were represented often by several generations in the same family. Somewhat quiet and reserved, he was nevertheless a kindly, friendly, lovable man who held the esteem and highest respect of his friends and neighbors. On his retirement from teaching more than six hundred of his former patrons and pupils gathered at his home to do him honor, and he received hundreds of greetings from former pupils in half the states of the Union.

While not a scientist in the professional sense of the word, nevertheless Mr. Liston made a distinct contribution to science through his

example and influence on the lives of others, and the Academy could well profit from the interest and support of others like him who pursue science as a hobby.

MARCUS WARD LYON, JR.

Rock Island Arsenal, Illinois
February 5, 1875

South Bend, Indiana
May 19, 1942

The success and prestige attained by any organization depends very largely on the caliber of the men and women it attracts to its membership. The Indiana Academy of Science has been very fortunate in this respect, for it has had at all times active in its work a group of members with national and international reputations. To the younger scientists the contacts with these mature and recognized scientists are invaluable and the Academy program may well be a training and proving ground for the beginner in research, for the criticisms and approval of these prominent members is a fine preparation for the national scientific forum. And in one's scientific association with Marcus Ward Lyon, Jr., one was working with such a man of high scholarly and scientific achievement who was zealous for the truth and impatient with anything less than one's best efforts. Dr. Lyon was one of the most broadly trained men in the Academy, for he was equally at home in zoology, botany or medicine, and his published research ranged over mammology, bacteriology, parasitology, pathology and botany, and he was professionally a zoologist, bacteriologist and pathologist.

Marcus Ward Lyon, Jr., was the son of an army captain and his boyhood was spent around army posts. Following his graduation from Rock Island High School in 1893 he entered Brown University and received the Ph.B. degree in 1897. He taught bacteriology for one year in North Carolina Medical College and then went to Washington, D.C., as Aid in the Division of Mammals, U.S. National Museum. He was made Assistant Curator in 1907, which position he held until 1912. In 1899 he and Lieutenant Wirt Robinson were sent by the Museum to collect mammals in Venezuela, and in 1904 he was appointed Chief Special Agent for the U.S. National Museum for the Louisiana Purchase Exposition in St. Louis, and in 1905 for the Lewis and Clark Exposition in Portland, Oregon. A trip to Europe in 1911 enabled him to visit the principal museums there and to become acquainted with many of the leading zoologists of Europe. His work at the Museum was so arranged as to allow him to carry on his graduate studies at George Washington University, which conferred on him the M.S. degree in 1900, the M.D. in 1902 and the Ph.D. in 1913. He also taught physiology in the Medical School of Howard University in 1903-1904 and again from 1907 to 1909, after which he taught bacteriology for six years and then bacteriology and pathology from 1915 to 1917. The next year was spent in teaching veterinary zoology and parasitology in the George Washington University Medical School. The years 1917 to 1919 he served in the U.S. Army as pathologist at the Walter Reid General Hospital, attaining the rank of Major in the Medical Reserve Corps in 1919. In 1919 he and his wife,

who was also a physician, joined the South Bend Clinic where he remained as pathologist until his death.

Dr. Lyon was an ardent naturalist and nothing pleased him more than to study nature first hand. When permitted freedom from museum and laboratory duties he went into the field to gather specimens or to study birds and animals in their natural habitat. He made extensive zoological and botanical collections. His zoological collections are now in the U.S. National Museum, and the U.S. National Herbarium, Smithsonian Institution, and the University of Michigan Herbarium each possess extensive botanical collections that Dr. Lyon made. His principal zoological interest was mammals, both living and prehistoric, and one of his deepest regrets was that the State of Indiana possessed no suitable museum for housing the prehistoric finds made in the State. He was an authority on mammalia and he was one of the collaborators on *Nomenclator animalium generum et subgenerum* being published by the Prussian Academy of Sciences in Berlin. He was also author of a book *Mammals of Indiana*. But Dr. Lyon was primarily a physician and among his 160 papers on biological and medical subjects are many reports on unusual or interesting cases that passed through the clinic. These appear in the *Journal of the American Medical Society*, *Journal of the Indiana Medical Association*, and other medical journals.

Dr. Lyon maintained numerous scientific affiliations. He was a Fellow of the American Association for the Advancement of Science, an Associate of the Ornithological Union, and a past president of the American Society of Mammalogists. He held membership in national societies of bacteriologists, ecologists, parasitologists, and pathologists, as well as in national and state medical societies, and the American Chemical Society. He was also a member of Phi Beta Kappa and Sigma Xi. Dr. Lyon was very active in the Indiana Academy of Science and served as treasurer from 1927 to 1932 and as president in 1933. He frequently presented papers and actively supported its conservation efforts. Keen and witty, his friendly and wise comments, suggestions and influence were always welcome at Academy meetings, and his loss will be deeply felt in Indiana scientific and medical circles.

ARTHUR JOHN PHINNEY

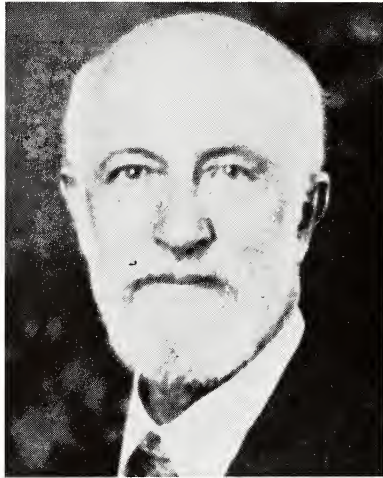
Geauga County, Ohio
August 29, 1850

Franklin, Indiana
May 26, 1942

Arthur John Phinney was a charter member of the Indiana Academy of Science, but he had not been active in the Academy for many years. However, he was present at the Fiftieth Anniversary Meeting in 1934 and spoke at the banquet. Until his retirement on account of his age he had been a practicing physician for thirty-two years, twenty-seven of which were spent in Muncie, Indiana.

Dr. Phinney was born on a farm twenty miles east of Cleveland, Ohio, and he received his early education in a country school and in the high school and academy of a neighboring village. He then attended Oberlin College for one year and Allegheny College for two years after

which he taught school for six years. In 1875 he entered the Western Reserve University Medical School and later graduated with the M.D. degree in 1877 from Pulte Medical School, Cincinnati, Ohio. However, being deeply interested in botany he began working on the flora of Ohio and Indiana and gathered specimens of flowering plants, rushes, sages, grasses and ferns. His list of nearly one thousand species was published in the *Report of the Indiana Geological Survey for 1882*. He joined the Indiana Geological Survey under State Geologist John Collet and made surveys of Delaware, Randolph, Grant, Rush, and part of Wayne counties, the results of which appear in the *Reports* for 1882 to 1885.



The last work was done under Maurice Thompson, who was then State Geologist. Becoming interested in the discoveries of gas in Ohio and Indiana, Dr. Phinney made careful study of the geology of the fields which led to his employment by the U.S. Geological Survey. The results of these studies were published in the *Eleventh Annual Report of the U.S. Geological Survey*. Later Dr. Phinney took up medical practice in Muncie, Indiana, which he followed until his retirement.

Dr. Phinney was widely read and deeply interested in the origin and evolution of religious beliefs, in the origin of the American Indian, whom he believed to be due to a cross of the black and brown man, and the great problems of irrigation of parts of the western American deserts. He had written some 1,200 pages of manuscript which a few years ago he hoped to have published. A deeply earnest man of firm convictions, his last years of a long, interesting and worthwhile life were spent in the Masonic Home at Franklin, Indiana.