

NECROLOGY

WILL E. EDINGTON, DePauw University

BENJAMIN HARRISON GRAVE

Monrovia, Indiana
December 5, 1878

Indianapolis, Indiana
January 25, 1949

In a memorial service for Benjamin Harrison Grave, held in his home a few days after his death, by friends and associates from DePauw University and Wabash College, the tributes to the man and his work were spoken by both men and women in no prearranged ritual but only as the spirit moved them. This was in keeping with the life that Ben Grave had lived, for as a birthright Friend his whole career was characterized by simplicity, sterling integrity and fearless defense of what he believed to be right and true.

Born in Monrovia but descended from Wayne County pioneers, most of his life was spent in Indiana. Graduating from the Friends Central Academy at Plainfield, he entered Earlham College and received the Bachelor of Science degree in 1903. He immediately went to Carleton College as an instructor in biology where he remained until he received the M.S. degree three years later. Following a year at Earlham College as Assistant Professor of Biology he entered Johns Hopkins University as a Fellow where the Ph.D. was conferred on him in 1910. He spent the next three years as Professor of Zoology at the University of Wyoming, followed by seven years at Knox College as Professor of Biology. In 1920 he became Professor of Zoology at Wabash College, leaving there in 1928 to accept the departmental headship in Zoology at DePauw. Dr. Grave became a Fellow in Embryology in the Marine Biological Laboratories at Woods Hole, Massachusetts, in 1919, and he spent a number of summers there as an instructor. He was also a Fellow at Yale in 1926-1927. He was stricken by a serious illness and was forced to retire in 1942 as Emeritus Professor of Zoology. Following his retirement he remained in Greencastle, except for short periods spent in hospitals and clinics in an attempt to relieve his suffering, until his passing on January 25, 1949.

Dr. Grave as a teacher and lecturer had that intense enthusiasm that was contagious. Students who began their work with indifference were inspired to continue their study on to advanced degrees and the records show that approximately 85 per cent of his major students received advanced degrees either in zoology, medicine or kindred sciences. He possessed an uncanny ability quickly to recognize and appraise the

innate abilities of students and many of his former students are now in the leading laboratories of the United States. He insisted on accuracy, rigor and high educational standards and he had little patience with indifference, laziness or superficiality. He was deeply interested in spiritual values and the problems of human welfare and was a bitter foe of intolerance or tyranny in any form either on or off the campus.

Dr. Grave was a member of the American Association for the Advancement of Science for almost forty years and was made a Fellow in 1915. He was also a long time member of the American Society of Zoologists. He joined the Indiana Academy of Science in 1920 and was active in its work, serving as chairman of the Zoology Section several times and also on the Membership Committee. His first paper before the Academy was presented in 1924 and this was followed by others of which a half dozen were published in the *Proceedings*. His research and publications in the *Proceedings* and other scientific journals were in the fields of embryology and physiology.

Dr. Grave derived a deep and intense enjoyment in the study of nature. An athlete in his undergraduate days and holder of several campus records in track and field sports, he was never happier than when he was on a hike in woods or along streams, and it was not unusual for him and Mrs. Grave to take long moonlight walks as long as his health permitted. Dr. Grave recognized no conflict between religion and science and his studies in nature only strengthened his faith in the supreme good. This faith characterized his work and influence on the numerous successful students who constitute a living memorial to his memory.

CARL F. HANSKE

Kiel, Wisconsin
September 13, 1892

Indianapolis, Indiana
November 28, 1948

Less than a century ago, long after a number of Indiana colleges had been founded, the first high school in Indianapolis was established. Known as the common people's colleges these high schools became just that, and it is difficult for one to realize the tremendous influence such great high schools as Shortridge, Arsenal Tech, and Manual Training, with numbers in attendance greater than any but the largest Indiana universities, have wielded and continue to wield on Indiana and American thought and action. Likewise the great science departments of these high schools pour out a never ending stream of more or less scientifically minded and scientifically enthusiastic youngsters from whom come and will continue to come the scientists who make America great. Instructor in such a department for twenty-nine years, twenty-two years of which he served as Head, Carl F. Hanske was widely known and prominent in

high school scientific circles and his untimely death on November 28, 1948, at the age of fifty-six years, is much to be regretted.

Carl F. Hanske was born at Kiel, Wisconsin, where he spent his boyhood and received his grade and high school education. He entered Ripon College and following his graduation in 1913, he became a science teacher and later principal in the Menominee, Wisconsin, High School. Early in 1918 he entered the army, serving at Yale University in Gas Defense in the Chemical Warfare Division. Following his discharge from the army he came to Indianapolis in the Fall of 1919 as a teacher in chemistry in the Emmerich Manual Training High School. He was made Head of the Science Department in 1926, which position he held at the time of his death. He also completed work for the M. A. degree in 1929 at the University of Wisconsin. He taught summer school at the Culver Military Academy in 1921 and 1922, and directed the Manual High school night school from 1941 to 1943.

Mr. Hanske was a very stimulating teacher and capable administrator, who had deliberately chosen to enter the field of education rather than that of chemical engineering for which he was also prepared. Of a kindly and friendly disposition he endeared himself to his students and others and he frequently made his scientific discussions more interesting and effective through his humorous approaches and keen wit.

Mr. Hanske was an excellent photographer and he had considerable talent in drawing and painting. His interest in science was general and his teaching was enhanced by several trips to Cuba and a summer spent in Europe.

Professionally Mr. Hanske was prominent in the Federation of Indianapolis Public School Teachers, having served as treasurer and vice-president. He was active in the Central Association of Science and Mathematics Teachers and only his illness prevented his having a very active part in the Association's annual meeting in Indianapolis in 1948. He was also a member of Phi Delta Kappa educational fraternity. Mr. Hanske had been a member of the Indiana Academy of Science since 1945.

THOMAS FREDERICK HARGITT

Waldron, Indiana
September 30, 1881

Bloomington, Illinois
June 1, 1949

Thomas Frederick Hargitt was born near Waldron, Indiana, and was related to Charles Wesley Hargitt, one of the Founders of the Indiana Academy of Science. Thomas F. Hargitt received his elementary education in the Decatur County public schools. In 1903 he began teaching in Indiana schools and between sessions attending the Indiana State Normal School at Terre Haute, from which he graduated in 1915. During the next four years he taught in Cynthiana in Posey County. He entered Indiana University in 1919, received the A. B. degree in 1920

and the M. A. degree the next year. Following a year as Professor of Physics at Kansas Wesleyan University, he returned to Indiana University and completed his work for the doctorate in 1924, serving as an acting instructor in physics during the last year. He accepted the professorship of Physics at Illinois Wesleyan University in 1924 and remained there until illness forced his retirement some four years before his death on June 1, 1949. During the last World War he was on leave to teach Navy V-12 men for eight months at Wesleyan University, Middletown, Connecticut, and at Illinois State Normal University from August 1943 to June 1944.

Dr. Hargitt was recognized as a scholar. He was intensely interested in the discoveries of modern physics and their influence on philosophic thought and this interest enabled him to convey a certain enthusiasm to his students, particularly those in his advanced courses, for the subject of physics, so that many of them have made exceptional advancement since graduating from Illinois Wesleyan. He was a man of small stature, clear blue understanding eyes, a ready smile and infinite patience, whose ability as a teacher was recognized by both his students and Faculty associates. While primarily a teacher he had done some research work in sound and he was the author of *Physics Experiments Laboratory Manual* published in 1933.

Dr. Hargitt was a Fellow in the American Association for the Advancement of Science and he held memberships in the Optical Society, the Society of American Physics Teachers, the Physics Teachers of Illinois, the Illinois Academy of Science, and Sigma Xi. He joined the Indiana Academy of Science in 1923 and while unable to attend its meetings he had maintained his interest in its work through the years.

GEORGE DONALD KLOPP

Reading, Pennsylvania
July 1, 1908

Indianapolis, Indiana
May 30, 1949

The sudden death of George Donald Klopp on May 30, 1949, at the age of forty, came as a great shock not only to his family but to his students and associates at Shortridge High School and numerous friends at Indiana Central College and in the Junior Academy of Science. And what is more to be deplored is that he was stricken while at the height of his powers and at a time when he had become most effective.

He was born at Reading, Pennsylvania, but was brought to Indianapolis as a boy and completed his public school education at Shortridge High School. He immediately entered Indiana Central College, in 1928, and was graduated in 1932. The following year the Master's degree was conferred upon him at Butler University. He then returned to Indiana Central College as an instructor in botany which position he held for four years. In 1931 he also became an assistant to Dr. William P. Morgan, Professor of Zoology at Indiana Central College,

in Indiana University Extension work and he continued in this work for seventeen years. He began teaching at Shortridge High School in January, 1939, and remained there until his death.

Mr. Klopp's Master's thesis was research in plant cytology but he was mainly interested in field work in botany and zoology. He was very skillful in dissection work and through his suggestions new laboratory methods were originated in the Indiana Central College and Shortridge laboratories. He had made a hobby of collecting a great mass of material in the form of posters, scrapbooks, demonstrations, reproductions of colored bird plates and kodachrome slides of flowers in their natural state, to be used in his teaching, and his large collection of plates and slides and his extensive file of scientific articles are now at Shortridge. He spent three summers as a nature guide at McCormick's Creek State Park and three summers as nature instructor at Camp Chank-Tun-Un-Gi, in the Indianapolis Boy Scout Area, and he was active in Boy Scout Merit Badge work on birds and other nature study up to the time of his death. He possessed a pleasing personality and his deep interest in character building coupled with his skill and popularity as a teacher made him a real force in his classes and his other youth work.

Mr. Klopp joined the Indiana Academy of Science in 1930 when he was only twenty-two years of age, and he was active in furthering the Club work of the Junior Academy. He was elected a Council Member of the Junior Academy in 1947 for a term of four years and his passing is great loss to that organization as well as to the Academy itself. Likewise, quoting from a memorial issued by the Superintendent of the Indianapolis Public Schools, "In his sudden death the public schools and the community have lost an outstanding man whose career had demonstrated unusual capacity for public service. His memory will be cherished by all who knew him."

DAVID ANDREW ROTHROCK

Milltown, Indiana
January 31, 1864

Lafayette, Indiana
September 2, 1949

Another tie with the most interesting and probably the most outstanding period in the history of Indiana University was broken with the death of David Andrew Rothrock whose association with Indiana University as a student began over sixty years ago. He was born at Milltown January 31, 1864, and after completing what the public schools of the village offered, as was common in those days, he began teaching at the age of seventeen in a one room country school. Between terms of teaching he attended Indiana University and was graduated in 1892 at the age of twenty-eight. Thus he came under the influence of David Starr Jordan, who left Indiana University in 1891, and John M. Coulter who succeeded Jordan as President.

Following his graduation Mr. Rothrock was immediately employed as an instructor in mathematics and he began his long association with

Robert J. Aley and Schuyler C. Davisson and a little later with Ulysses S. Hanna. These four became known as the "Big Four" in mathematics at Indiana University but this "Big Four", unlike the "Big Four" at the University of Chicago who were primarily research men in mathematics, was composed of outstanding and inspirational teachers of undergraduates whose work resulted in the remarkable fact that in 1930 more members of the American Mathematical Society had received their undergraduate training at Indiana University than at any other University in the country except Harvard.

In 1893 Joseph Swain, a graduate and former Head of the Mathematics Department of Indiana University who had gone with Jordan to Stanford University, succeeded Coulter as President. Robert J. Aley, also a graduate of Indiana University, had succeeded Swain as head of the Mathematics Department in 1891, and Schuyler C. Davisson had been made an instructor in mathematics immediately following his graduation in 1890, as was Rothrock following his graduation in 1892. Mr. Rothrock spent the year 1894-1895 at the University of Chicago and was promoted to an assistant professorship on his return to Indiana University. U. S. Hanna graduated from Indiana University in 1895 and was immediately appointed to an instructorship and thus what were to become the "Big Four" were working together under a President who also was a mathematician. In 1897 Professor Rothrock went to Germany where he received the Ph.D. degree in 1898 from the University of Leipzig. Promotions followed rapidly as he became associate professor in 1900, junior professor in 1905 and professor in 1908. A study of this period from 1888 to 1908 inclusive shows that out of 2084 students who received the A. B. degree at Indiana University one eleventh had majored in mathematics.

Dr. Rothrock was appointed Dean of the College of Arts and Sciences in 1920 from which he retired in 1937 to serve his last active year as Director of Admissions, following which he retired as Professor Emeritus after forty-six years of service to Indiana University. Dean Rothrock was methodical and careful in his records and at the time of his retirement he stated that 8,791 students had been enrolled in his classes. Dr. Aley once said that Dr. Rothrock was the best teacher of mathematics he had ever known, and the history of the period would seem to indicate his excellence within a group of splendid teachers.

However, Dr. Rothrock was more than a university teacher for he was civic minded and a man of action. He served as city engineer for Bloomington for two years and was a member of the Bloomington City Council from 1918 to 1926 and led the movement to construct the waterworks at Griffey Creek to insure an adequate water supply for the city and the University. He was a representative in the Indiana Legislature from 1919 to 1921. He was appointed a member of the State Conservation Commission in 1925 and served eight years with Stanley Coulter and Richard Lieber, all three retiring from the Commission in 1933.

Dr. Rothrock was long a member of the American Mathematical Society and the Mathematical Association of America, and he had been

a member and Fellow of the American Association for the Advancement of Science. He was also a member of Phi Beta Kappa and Sigma Xi. He joined the Indiana Academy of Science in 1898, became a fellow in 1906, and was active in its work for forty years, his last service being to help organize the Mathematics Section of the Academy in 1935. In his earlier years before administrative work absorbed most of his time, he did research in invariant theory and differential geometry, and among his publications eight appeared in the *Proceedings* of the Academy. He was also the author of two textbooks, one on algebra in 1904 and the other a trigonometry published in 1910.

Dean Rothrock was prominent in Bloomington Masonic circles and received the Indiana Grand Lodge Award of Gold, given to Masons who have completed fifty years of service. He was active in church work and also in the Bloomington Rotary Club.

Saddened by the death of his wife a few months before and ill himself for eight months, he passed away on September 2, 1949, at the age of eighty-five years, in Lafayette where he had been visiting one of his sons. In David A. Rothrock Indiana had one of its finest citizens and public servants and his work as an educator has brought glory both to the State and to Indiana University.