

Biographical Sketches of Indiana Scientists IV

WILL E. EDINGTON, DePauw University

This is the fourth paper of a series begun in 1960, presenting brief sketches of Indiana scientists whose careers were largely completed before *Who's Who in America* and *American Men of Science* became comprehensive. In their day they were outstanding teachers whose influence extended far beyond their class rooms.

James Harvey Baxter was born in Hillsdale County, Michigan, and later gave his home address as Lawrence, Michigan. He began his Indiana teaching career in 1905 as an assistant professor of mathematics in the Indiana State Normal School in Terre Haute. Following the organization of the Eastern Division of the Indiana State Normal School in 1918 in Muncie as a branch under the supervision of the Terre Haute school, a number of the younger members of the faculty of the Terre Haute School were transferred to the Muncie school as Heads of Departments. Thus James Harvey Baxter became the first Head of the Department of Mathematics of what is now Ball State University. Baxter had graduated from Tri-State Normal School at Angola, Indiana, and later, in 1903, received a "general diploma" from the Ypsilanti Normal School, now Eastern Michigan University, but neither institution records that any degree was conferred. However, he received the A.B. degree in 1906 from the University of Michigan and later spent the year 1911-1912 there in graduate study. He never married. He was an excellent and popular teacher who encouraged his students to continue their study. He aided many worthy ones financially who went on to outstanding careers: Raleigh Schorling, William D. Reeve, Marshall Byrne, and others. At the time of his death several students were living in his home. He was active in civic affairs in Muncie, being a member of the Chamber of Commerce, the Exchange Club, the Masons and the Elks. In his later years he suffered from a heart condition and died suddenly on July 29, 1926, of a heart attack.

Ruth Gentry was born on February 22, 1862, in Stilesville, Indiana, and died on October 18, 1917, in Indianapolis, Indiana. Her ancestors came from Kentucky to Hendricks County, Indiana, in 1832, her father being Jeremiah Gentry, a farmer and stock trader. She received the education afforded by her community and then entered the Indiana State Normal School from which she graduated in 1880. Following several years of teaching, she entered the University of Michigan where her talent for mathematics became apparent. She received the Ph.B. degree in 1890 and also was awarded a Fellowship in Mathematics to study at Bryn Mawr College for the year 1890-1891 under the celebrated English woman mathematician, Charlotte A. Scott, who had come to Bryn Mawr at its founding in 1885 to head the Department of Mathematics. In 1891 Miss Gentry was the recipient of the European Fellowship of the Association of Collegiate Alumni and spent the year 1891-1892 as a student in mathematics at the University of

Berlin. The next year as a Fellow in Mathematics at Bryn Mawr, she studied at the Sarbonne, in France. She was a Fellow by Courtesy in Mathematics at Bryn Mawr during the year 1893-1894 and received the Ph.D. degree in Mathematics and Physics at Bryn Mawr in 1896. In 1894 she became an Instructor in Mathematics at Vassar College and in 1900 was promoted to Associate Professor. Two years later she became Associate Principal and Head of the Department of Mathematics in a private school in Pittsburgh, Pennsylvania. From 1905 to 1910 I have no record of her activities. In 1910-1911 she was a volunteer nurse. From 1911 to 1914 she traveled extensively in the United States and Europe. She is listed in the Directories of the American Mathematical Society as retired from 1914 to 1917, giving Stilesville as her home address. Ruth Gentry became a member of the New York Mathematical Society in February, 1894. This Society became the American Mathematical Society later in 1894 and Miss Gentry continued as a member until her death. Her mathematical interest was in geometry and her thesis for the doctorate was an outstanding contribution in the study of quartic curves. Ruth Gentry was a woman of unusual intellectual attainments and was the first native-born Indiana woman to receive a Ph.D. degree in Mathematics and probably the first native Indiana woman to receive an earned Ph.D. in any scientific discipline.

Oscar Lynn Kelso was born in Ireland, DuBois County, Indiana, on October 10, 1855. After graduating from the Indiana State Normal School in 1879 he entered the Junior Class at Indiana University in 1882, received the B.S. degree in 1884, and the A.M. degree in 1890. He was Principal of the Bruceville, Indiana, schools from 1879 to 1882 and also did some teaching in Bedford from 1882 to 1884 while a student at Indiana University. He was Principal of the Anderson, Indiana, High School in 1884-1885, and of the Richmond, Indiana, High School from 1885 to 1894. In 1894 he was made Professor and Head of the Department of Mathematics in the Indiana State Normal School (now Indiana State University). He retired in 1924. During the summers of 1897 and 1898 he did graduate study in mathematics at the University of Chicago. He was author of *Arithmetic for High Schools, Normals and Academies* and joint author, with Robert J. Aley of Indiana University, in the revision of the *Cook-Cropsey Arithmetic*. He was also author of three papers published around 1900. In 1907 the American German Trust Company in Terre Haute was incorporated with Professor Kelso as President, but he sold his interests six years later. At one time he was President of the Kettle Valley Mining Company in Terre Haute. He was a member of the Indiana Academy of Science from 1896 to 1911, and also active in the Indiana State Teachers Association. During the Thanksgiving season of 1927 he suffered a broken hip and was confined in the Union Hospital continuously until his death on July 13, 1930. Professor Kelso was a most effective and influential teacher who was known to a large number of the teachers in Indiana.

William Butler Morgan was born on December 21, 1830, in Dublin, Indiana, but most of his early life was lived in Raysville, Indiana, one mile east of Knightstown. He learned the carpenter trade from his

father but his mother influenced him to enter (in 1848) the Friends Boarding School, later Earlham College, where he studied a year and a half. After teaching one term at West Milton, Ohio, he entered Haverford College where he received the A.B. degree in 1852 and the A.M. degree in 1853, and also taught some Latin in this last year. Following two years of teaching Latin in Westtown Boarding School in Philadelphia, he returned to Earlham in 1855 to teach Latin and Greek for five years. About 1858 he became President of the "Philosophical and Literary Institute of the Indiana Yearly Meeting," and this Society, led by Morgan, designed, erected (in 1861), and partially equipped the astronomical observatory on the Earlham campus. This observatory contained a large achromatic telescope with a six and one-half inch object glass. Morgan also secured through the Coast Survey in 1861 the loan of a fine transit telescope from the U. S. Government which reloaned it in 1881 after learning that it was still in use at Earlham. The Observatory at Earlham was the first observatory in the State and the big telescope is still in use.

In 1860 Morgan began teaching mathematics at Earlham but two years later entered the University of Michigan to study mathematics and astronomy. At Michigan he received the B.S. degree in Civil Engineering in 1863 and then returned to Earlham, teaching mathematics for two years. He spent the year 1865-1866 as an associate professor of mathematics at the University of Michigan and then returned to Earlham again for a year. In 1868 he went to Spiceland Academy to teach mathematics. It should be realized that Quaker academies like Spiceland and Bloomingdale were more than high schools. Bloomingdale Academy offered courses in trigonometry and analytic geometry as early as 1863 and Spiceland Academy was offering courses in analytical geometry, calculus and astronomy in 1873. While at Spiceland Morgan built its library up to 3,000 volumes. Several years after going to Spiceland he taught in the Indianapolis High School. In 1874 he was appointed the first Professor of Mathematics at Purdue University, teaching algebra, geometry, trigonometry, surveying and civil engineering, at a salary of \$2,000 a year. However, Purdue, a land-grant college, set up as one of its seven professorships a military professorship, of which Morgan did not approve, and he resigned in 1875. He returned to Earlham to teach chemistry and serve as Governor, similar to a Dean of Men. In 1876 he went to Penn College, in Oskaloosa, Iowa, where he taught mathematics for seven years and also served as President the last two years. Finally he returned to Earlham in 1883 where he taught mathematics until his retirement in 1898. However, in 1893, he became interested in a mathematics institute in Lowell, Kansas, which he founded and where he worked during his vacations. He was also interested in the Wyandotte and Modoc Indians who lived in Kansas. Following his retirement he went to Lowell, Kansas, to live. His death occurred there on February 22, 1904. William B. Morgan was a remarkable man of strong convictions and sterling character who helped tremendously in making Earlham one of the outstanding colleges of the State.

Moses Cobb Stevens was born in Windham, Maine, on July 5, 1827. His early education was received in the Friends Boarding School in Providence, Rhode Island, where he taught five years after his graduation. In 1852 he came to Indiana to teach mathematics in the Friends School known as Farmers Institute, near Lafayette. The next year he accepted a similar position in the Greenmount Hicksite School in Richmond, Indiana, and remained there four years. He spent the year 1857-1858 teaching mathematics in the Friends Boarding School, later Earlham College, in Richmond, and was then appointed Professor of Mathematics in Haverford College where he remained until 1871. From 1871 to 1880 he was Superintendent of Schools in Salem, Ohio, and also taught mathematics in the High School. In 1880 he became Registrar and Librarian at Purdue University. Following the retirement in 1883 of David G. Herron, Professor of Mathematics at Purdue, Stevens was made Professor of Mathematics. Also in 1880 he began twelve years of service as a Trustee for Earlham College. Earlham conferred an honorary A.M. degree on him in 1883. Although a member of the Faculty, he was appointed Secretary of the Purdue Board of Trustees in 1885 serving in that capacity until 1889. He continued teaching until 1902 and then retired as Emeritus Professor of Mathematics.

Professor Stevens was one of the first nine Indiana men to join the New York Mathematical Society in 1891. This Society became the American Mathematical Society in 1894 and Stevens remained a member until his retirement in 1902. He also joined the Indiana Academy of Science shortly after its founding in 1885. His death occurred on March 20, 1910. Following his death a contemporary of his wrote: "It is impossible to convey to those who did not know him personally a sense of his fine character and estimable qualities. He expected thorough work from all his students and had no tolerance for the negligent or incompetent. In spite of these rigid classroom requirements he was probably the best beloved instructor who has ever served the university."