

STOKES, Ellen Clayton. September 27, 1900–May 23, 1974.

BROWN UNIVERSITY (WOMEN'S COLLEGE) (BA 1923), BROWN UNIVERSITY (MA 1924), UNIVERSITY OF CHICAGO (PHD 1939).

Ellen Clayton Stokes, born in Hackensack, New Jersey, was the middle child of Louisa Cartwright (Stoney) (b. 1873) and John Edgar Stokes (b. 1872), both natives of New York State. Her older brother, John Wesley, was born in 1898. When the 1900 census was enumerated, her parents, who had been married five years, and her brother were living with her maternal grandparents in Hackensack, New Jersey. Louisa Stokes died in childbirth six years later when the youngest child, David, was born. John Edgar Stokes was a successful manufacturing representative with New England Yarn Company until after World War I. He was later involved in retail selling and owned an appliance store.

Ellen Stokes received most of her elementary and all of her secondary education at boarding schools in Beaver Dam, Wisconsin, where she first attended Hillcrest School and then Wayland Academy. Her father remarried in 1917, and he and his second wife, Wilhelmina (Birkhoff) Stokes (1880–1975), had one daughter, Joan, eighteen years younger than Ellen.

The Stokes family was living in Providence, Rhode Island, when Ellen Stokes entered Women's College in Brown University in 1919. While there she studied with R. G. D. Richardson and R. C. Archibald, among others. She earned her bachelor's degree in 1923 and her master's degree the following year.

In 1924 Stokes accepted a position as instructor in mathematics at Coker College for Women (now Coker College) in Hartsville, South Carolina. While she was at Coker, Stokes was considering further studies in mathematics. In a note to Richardson in January 1925 she indicated that she had talked with Archibald about work for the next year and he advised staying at Coker for another year for the sake of her reputation.

After two years at Coker College, Stokes moved to the New York State College for Teachers in Albany (now the University at Albany, State University of New York), in part to be near family members who were living in the area. She spent the rest of her career there. In the summer of 1928, Stokes took three mathematics courses at Cornell University. Then, beginning in the summer of 1933, she studied for a total of nine quarters at the University of Chicago before receiving her doctorate there in December 1939 with a dissertation in the calculus of variations.

During the period of her studies at Chicago, Stokes remained an instructor in mathematics at the New York College for Teachers in Albany. In 1943 she became dean of women and stayed in that position until her retirement in 1965. A mathematics colleague at Albany was [Caroline A. Lester](#), who joined the faculty in 1929 and lived in the same apartment building as Stokes in some of their earlier years in Albany. In about the early 1950s, Stokes and two other women on the faculty, one in psychology and one in biology, bought a house in Albany, painted it pink, and shared the house for many years.

Ellen Stokes was described by her half-sister as about five feet six inches tall, of medium build, not beautiful, but very attractive. She was quiet and "never had an unpleasant word to say." She had a whimsical sense of humor and was fun to be with. She didn't do community work but was close to her family and adored children. Stokes was described as a perfectionist whose main hobby was handwork,

especially weaving and knitting, at which she excelled. She also played bridge and made two or three trips abroad with friends.

Ellen Stokes died in Albany in 1974 at age seventy-three after suffering an aneurysm. She was survived by her step-mother, who had been living with her in Albany, her half-sister in Schenectady, two nieces, and a nephew. Funeral services were held at St. Stephen's Episcopal Church in Schenectady.

Organizational affiliations: AMS, MAA, Phi Beta Kappa, Sigma Xi.

Dissertation:

1939 Applications of the covariant derivative of Cartan in the calculus of variations. PhD dissertation, University of Chicago, directed by Gilbert Ames Bliss. Private edition, 1942, distributed by the University of Chicago Libraries, reprinted from *Contributions to the Calculus of Variations, 1938-1941*, 139-74.

Publication:

1942 Applications of the covariant derivative of Cartan in the calculus of variations. In *Contributions to the Calculus of Variations, 1938-1941*, 139-74. Chicago: Univ. of Chicago Press. Published version of PhD dissertation. Review: *MR* (S. B. Myers) 4,46g.

Reference to:

"Stokes." (Death notice) *Albany Times-Union*, 24 May 1974.

Other sources: PhD dissertation vita 1942; application for social security account number 1942; telephone conversation with Joan E. Stokes (half-sister), 11 Aug 1998; Brown University Archives (R. G. D. Richardson Papers); US Census 1900 NJ, 1920 RI, 1930 NY.

Last modified: July 20, 2009.