

MAUCH, Margaret E. June 1, 1897–November 16, 1987.

HURON COLLEGE (BS 1919), UNIVERSITY OF CHICAGO (MS 1923, PhD 1938).

Margaret Evelyn Mauch was born in De Smet, South Dakota, the first child of Rose (Brekhus) (b. 1868) and Henry Mauch (b. 1861). Her mother was born in Norway and her father in Wisconsin of German parents. Mauch grew up in the east central area of South Dakota near De Smet. At the time of the 1900 census the family was living in Lake Preston, her parents had been married four years, and her father's occupation was listed as harness maker. A younger sister, Ruby Henrietta, was born in 1899. By 1910 Henry Mauch, now a banker, had been remarried for three years, and the family was living in Hetland. In much of the second decade of the century, Henry Mauch was secretary-treasurer of the Arlington-Hetland Telephone Company. By 1930 he was bank president. There were two sons from the second marriage: Ralph, born in 1909, and Harold, born two years later.

Margaret Mauch attended elementary and secondary public schools in South Dakota. She studied at Huron College (now closed) in Huron, about thirty miles from De Smet. After receiving her bachelor's degree in 1919, she taught for a year at the Winner, South Dakota, high school in the south central part of the state and then was principal of the Edgerton high school in Minnesota for a year. The next two years, 1921–23, Mauch attended the University of Chicago where she was secretary-treasurer of the Junior Mathematical Club 1922–23. She received her master's degree with a thesis in theoretical mechanics in 1923.

Mauch taught in the high school in Jacksonville, Florida, 1924–25 and was an instructor and assistant professor at Randolph-Macon Woman's College in Lynchburg, Virginia, 1925–29. She returned to the University of Chicago to take graduate courses during the summers of 1926, 1928, and 1929. Following the summer of 1929 she remained at Chicago for the academic year 1929–30. She again took summer classes at Chicago during 1931 and 1938 and received her PhD in 1938 having written a dissertation in number theory under the direction of L. E. Dickson. Although Mauch's degree was not conferred until 1938, she had obtained some of her results on Waring's theorem for seventh powers considerably earlier. In Dickson's 1933 article, "Recent Progress on Waring's Theorem and its Generalizations," he mentions her work on page 721 at the end of the section he calls "Remarkable Empirical Generalizations of Waring's Theorem."

Mauch was head of the mathematics department at the high school in Brookings, South Dakota, 1934–42 and then was an instructor and assistant professor at Carleton College in Northfield, Minnesota, 1942–44. She spent 1944–45 as an instructor at Michigan State College (now Michigan State University). In 1945 Mauch became assistant professor at the University of Akron, where she was to stay the remainder of her career. When she first went to Akron she regularly attended meetings of the Ohio Section of the MAA and was a referee for the *American Mathematical Monthly*. She was promoted to associate professor in 1950 and to professor in 1962. She retired in June 1963 but continued teaching at the University of Akron and was given the rank emeritus professor in 1966.

In 1966 Margaret Mauch and her sister, Ruby Mauch, moved back to Huron, where they both had attended college and where their younger brother, Ralph, a graduate of the University of South Dakota Law School, was an attorney and officer of the Northwestern Public Service Company. Ruby Mauch had also taught in high

schools in South Dakota after her college graduation, later earned a library degree from the University of Illinois, and, among other library positions, served for twenty-seven years in the library at the South Dakota School of Mines and Technology; she retired in 1964. Ralph Mauch died at seventy-five in 1985. Margaret Mauch died at the Violet Tschetter Memorial Home in Huron at age ninety in 1987. She was buried in the Hetland, South Dakota, cemetery. Her sister, Ruby, died at the same nursing home five years later.

Organizational affiliations: AMS, MAA, AWM, Sigma Delta Epsilon, AAUW, AAUP, Sigma Xi.

Thesis and dissertation:

1923 The motion of a certain rotating bar. MS thesis, University of Chicago, directed by William Duncan MacMillan. Typescript.

1938 Extensions of Waring's theorem on seventh powers. PhD dissertation, University of Chicago, directed by Leonard Eugene Dickson. Typescript. Printed version, 1941, Chicago.

References to: AmMSc 7–8, 9P–11P; WhoAmW 8.

"Margaret E. Mauch." (Obituary) *Huron* (SD) *Daily Plainsman*, 17 Nov 1987.

Other sources: MS thesis vita 1923; PhD dissertation vita 1938; Owens questionnaire 1940; communication with Huron (SD) Public Library; L. E. Dickson, "Recent Progress on Waring's Theorem," *Bull. Amer. Math. Soc.* 39: 701–27; "Ralph E. Mauch." (Obituary) *Huron Daily Plainsman*, 9 Jun 1985; "Ruby H. Mauch." (Obituary) *Huron Daily Plainsman*, 22 Jan 1992; US Census 1900, 1910, 1920, 1930 SD, 1930 IL.

Last modified: March 8, 2009.