

SMITH, Clara E. May 20, 1865–May 12, 1943.

MOUNT HOLYOKE COLLEGE (BA 1902), YALE UNIVERSITY (PhD 1904).

Clara Eliza Smith was born in Northford, Connecticut, the only child of Georgiana (Smith) (b. 1834) and Edward Smith (1832–1894), a farmer and cabinet maker in Northford. She was educated with private tutors and entered Mount Holyoke Female Seminary in 1882. She graduated in 1885, four years before the first bachelor's degree was awarded by Mount Holyoke and eight years before its present name was adopted. Letters from this period of her life have been deposited in the Mount Holyoke College library.

Smith attended the Yale School of the Fine Arts 1886–87 and 1888–89 after which she was a teacher of drawing and assistant in mathematics at the Bloomsburg Literary Institute and State Normal School (now Bloomsburg University of Pennsylvania) for eight years, 1889–97.

Smith entered the Yale graduate school in 1901 to study mathematics. At that point she had taken plane and solid geometry and plane and spherical trigonometry as requirements for her graduation from Mount Holyoke Seminary. She also studied higher algebra, analytic geometry, and calculus on her own. Smith was awarded a bachelor's degree from Mount Holyoke College in 1902 after passing an exam on one year's additional work in French and on the presentation of a certificate from Yale for courses in mathematics. Her graduate work at Yale in 1901–02 was in vector analysis with J. W. Gibbs, differential equations and function theory with J. P. Pierpont, differential geometry with W. A. Granville, and projective geometry with E. B. Wilson. The next year she had theory of functions of a complex variable with Pierpont, advanced analytic geometry with P. F. Smith, higher algebra with H. E. Hawkes, partial differential equations with E. R. Hedrick, and transformations of space with A. G. Gale. In 1903–04 she took theory of functions of a real variable with Pierpont, continuous groups with Smith, and elliptic functions with Hawkes. Clara Smith wrote her dissertation under the direction of James Pierpont, a native of New Haven, who had gone to Yale after several years of study in Europe, especially in Berlin and in Vienna, where he received his PhD in 1894.

Clara Smith received her PhD in 1904 and remained at Yale as a reader in mathematics for two years, after which she was an acting instructor at Wellesley College 1906–07. The following year she was an instructor at The Western College for Women in Oxford, Ohio. In 1908 she returned to Wellesley as assistant and, except for leaves, spent the rest of her career there. She was an instructor 1909–14, associate professor 1914–24, professor 1924–34, (some years as the Helen Day Gould Professor), and emeritus professor after her retirement in 1934. She had three leaves of absence: in 1911–12, during which she traveled, attended the September 1911 meeting of the German mathematical society, and studied one semester at the university in Göttingen; in 1918–19, when she was an exchange professor at Goucher College; and in 1926–27, when she made a trip around the world.

While at Wellesley, Smith coauthored two books with [Helen A. Merrill](#); the first was “prepared for use in a required first-year course in Wellesley College” (p. iii) and was printed in 1914, and the second was published in 1917. Merrill was a long-time Wellesley faculty member who had earned her PhD from Yale a year before Smith, and who chaired the mathematics department from 1916 until her retirement in

1932. Smith was department chair for the following two years, 1932–34, before her own retirement.

Clara Smith served in a number of ways on the College Entrance Examination Board: as a reader starting in 1919, on a committee on revision, and on a board of examiners. She became a life member of the AMS, was permanent secretary of the membership committee during the 1920s, and was a trustee on the original board of the AMS in 1927, a thirty-one member body formed at the time of its incorporation. Smith and [Anna J. Pell \(Wheeler\)](#) of Bryn Mawr College were the only women on the board. Smith was a charter member of the MAA, served as a trustee 1923–25, and was vice president 1927. In a resolution voted on by the board of trustees at the annual meeting of the MAA, December 31, 1924–January 1, 1925, she was singled out for the efforts she made while she was in charge of a joint committee on membership of the AMS and the MAA. Her work for the AMS was also recognized in a resolution of the council in September 1925 and in one of several “resolutions on deaths of persons who have been prominent in the work of the Society” (*Bull. Amer. Math. Soc.* 49:827). That resolution read in part, “Much of the success of [the membership committee] was due to her laborious and painstaking assembling of data regarding teachers of college mathematics. On behalf of the Society, the Council wishes to acknowledge her loving interest in its welfare” (*Bull. Amer. Math. Soc.* 49:828).

Smith was a member of the Congregational Church. In 1923 she described her hobbies as “tramping and outdoor sports.” In July 1927, she was severely injured in an automobile accident. A news item from February 21, 1935, noted that [Lennie Phoebe Copeland](#) and Clara Eliza Smith, retired head of the mathematics department, “sailed last week from New York for travel in the near east including Egypt, Palestine, Syria, Uganda, Turkey, Greece, and Italy” (Lennie P. Copeland folder, Wellesley College Archives). They were due back in June. Smith and Copeland, her long-time friend and colleague in the mathematics department, shared a home in Wellesley from the early 1920s. In her response to a request for information from [Helen Owens](#) in 1937, Copeland noted that she would be spending the summer “on Miss Smith’s farm in the hills of Connecticut.” They both attended the September 1937 AMS meeting in State College, Pennsylvania, where Smith was one of three guests of honor at a luncheon organized by Owens that was “held in honor of the women who were pioneers in mathematical research in America” (*Bull. Amer. Math. Soc.* 43:747).

In May 1943, shortly before her seventy-eighth birthday, Clara Eliza Smith died of a cerebral hemorrhage at her home in Wellesley. She is buried at the Northford Cemetery in Connecticut. She had no immediate survivors.

Organizational affiliations: AMS, MAA (charter member), AAAS (fellow).

Dissertation:

1904 Representation of an arbitrary function by means of Bessel’s functions. PhD dissertation, Yale University, directed by James Pelham Pierpont. See also **1907**.

Publications:

1898 The geometry of Simpson’s line. *Proc. Indiana Acad. Sci.* 101–17. Review: *Rev. semestr. publ. math.* 13, pt. 1: 14 (Ch. A. Scott).

1907 A theorem of Abel and its application to the development of a function in terms of Bessel’s functions. *Trans. Amer. Math. Soc.* 8:92–106. Published version of PhD dissertation. Reviews: *JFM* 38.0490.01 (A. Wangerin); *Rev. semestr. publ. math.* 15, pt. 2: 12 (D. Coelingh). Presented to the AMS, New York City, 29 Dec 1905; abstract: *Bull. Amer.*

Math. Soc. 12:233 #18. Also presented as “Development of a function in terms of Bessel’s functions (second paper)” to the AMS, New York City, 24 Feb 1906; abstract: *Bull. Amer. Math. Soc.* 12:329 #9.

1914 with H. A. Merrill. *Selected Topics in College Algebra*. Norwood, Mass.: Norwood Press.

1917 with H. A. Merrill. *A First Course in Higher Algebra*. New York: Macmillan Co. Reviews: *Amer. Math. Monthly* 25:72–74 ([M. E. Wells](#)); “College algebras,” *Bull. Amer. Math. Soc.* 26:323–29 ([E. B. Cowley](#)); *Ed.* 38:354; *Nature* 100:263–64 (G. B. M.); *Sch. Sci. Math.* 17:756 (H. E. Cobb); *Science Progress* 12:684 (P. E. B. Jourdain).

1927 *A Brief Course in Trigonometry*. Ann Arbor, MI: Edwards Brothers.

Presentation not listed above:

The teaching of the subject of limits. Presented to the MAA, Baltimore, MD, 18 Jan 1919.

References to: AmMSc 2–6; BiDWSci; [BioWMath](#); InSci; InWom.

Copeland, Lennie Phoebe. “Clara Eliza Smith—An Appreciation.” *Wellesley Magazine*, June 1934, 431–32.

“Prof. Clara Smith of Wellesley, 78.” (Obituary) *New York Times*, 14 May 1943.

“Clara Eliza Smith,” *Yale Obituary Record* 1942–43.

Related manuscript material: Smith Family Papers, Mount Holyoke College, Archives and Special Collections, South Hadley, Massachusetts.

Other sources: Owens Papers; Wellesley College Archives; Yale University Archives; Grinstein, “Some ‘Forgotten’ Women of Mathematics”; Grace Goodyear Kirkman, *Genealogy of the Goodyear Family* (San Francisco, CA: Cubery, 1899); US Census 1870, 1880, 1930 CT.

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