

LeSTOURGEON, Elizabeth. June 1, 1880–February 6, 1971.

GEORGETOWN COLLEGE (BA 1909), UNIVERSITY OF CHICAGO (MA 1913, PhD 1917).

Flora Elizabeth LeSturgeon (also “Le Sturgeon”) was born in Farmville, Virginia, the daughter of Elizabeth Mary (Vinyard) (1854–1908) and Frederick George LeSturgeon (1846–1904). Her father was born in Illinois and her mother in New Jersey; they married in 1875 in Bridgeton, New Jersey. After their marriage her father farmed and operated canning companies in and near Farmville. Elizabeth LeSturgeon was the third child of seven; her siblings were: William George (1876–1955), Annie Emily (1878–1951), Charles James (1882–1918), Arthur Lloyd (1886–1958), Sarah Couth (1887–1970), and Percy Earl (1884–1977).

According to her master’s thesis educational brief, LeSturgeon received her primary and secondary schooling in the Virginia State Normal School (officially the State Female Normal School at Farmville, now Longwood University) and remained a year in post-graduate study. Normal School catalogues indicate that she graduated from the regular course with a full diploma in 1897 and remained 1897–98 as an irregular student. She had teaching positions for the next several years including in the public school in Bridgeton, New Jersey, from 1898 to 1901; in the Waynesboro, Virginia, public school starting in 1901; and at St. Katharine’s School in Bolivar, Tennessee, from at least 1906.

LeSturgeon studied several summers at the University of Virginia after it established a summer program primarily for public school teachers in 1907. Although this program allowed women to attend classes during the summer, it did not grant any course credit to the women participants. LeSturgeon then entered Georgetown College in Kentucky in September 1908 at age twenty-eight. After one academic year there she received her bachelor’s degree. She took additional course work in 1909–10 and also taught in the preparatory department 1908–10. Her brother Percy took some courses at Georgetown College 1909–11.

LeSturgeon was a professor of mathematics at St. Mary’s College, then an Episcopal college for women in Dallas, Texas, 1910–12. She studied at the University of Chicago during the summer quarters of 1911 and 1912 and for three quarters in 1912–13 as a holder of a scholarship in mathematics. Her master’s thesis, completed in June of 1913, was written under the direction of A. C. Lunn. For her master’s work, she took courses with H. E. Slaught, G. A. Bliss, E. J. Wilczynski, and A. C. Lunn in mathematics and with Kurt Laves in astronomy.

LeSturgeon spent the next two years, 1913–15, teaching mathematics at Beaver College in Pennsylvania, then a women’s college (now coeducational Arcadia University), before returning to the University of Chicago to complete her doctoral work. She held a fellowship during the year 1916–17 and wrote her dissertation in the calculus of variations under the direction of Bliss. In his 1972 book on the history of mathematics, Morris Kline observed that, “so far as the basic definitions of properties of functionals needed for the calculus of variations are concerned, the final formulations were given by Elizabeth Le Sturgeon” in the paper based on her dissertation (p. 1080). E. J. McShane had mentioned this work earlier in the published version of his 1938 address on the calculus of variations at the semicentennial celebration of the American Mathematical Society.

After receiving her doctorate in 1917, LeSturgeon taught at the Liggett School for Girls in Detroit. She was an instructor at Mount Holyoke College for the year

1918–19 and an assistant professor at Carleton College the following year. In 1920 she went to the University of Kentucky, where she was assistant professor 1920–26 and associate professor 1926–46. She had leaves of absence during the years 1927–28 and 1944–45. She was in Europe in the summer of 1928. Her youngest brother, Percy Earl LeSturgeon, was stationed at the University of Kentucky as assistant professor of military science 1929–35.

While at the University of Kentucky she often spoke to and served as an officer of the White Mathematics Club and the Pi Mu Epsilon chapter. She was a member of the Kentucky Academy of Science. In about 1940 LeSturgeon was active in a number of organizations including AAUW and AAUP and described herself as an Episcopalian and a Democrat. In June 1941 she recovered from injuries suffered in an automobile accident in Kentucky as she and a colleague in romance languages started for summer vacations in Mexico.

In 1948 and 1950 LeSturgeon listed her address in the AMS membership list as Delray Beach, Florida. By 1952 she was living in Washington, D.C., but apparently continued to spend winters in Florida. By the early 1960s she had moved to Bridgeton, New Jersey, where several relatives lived. Flora Elizabeth LeSturgeon had been a member of AMS fifty-nine years at the time of her death at age ninety in 1971. She died at Bridgeton Hospital, where she had been a patient for four days. She was survived by one brother and many nieces, nephews, and cousins, and is buried in Overlook Cemetery in Bridgeton.

Organizational affiliations: AMS, MAA (charter member), AAAS, AAUW, AAUP, Sigma Xi, Pi Mu Epsilon.

Thesis and dissertation:

1913 The relation of discontinuities to certain infinite series in the potential theory. MA thesis, University of Chicago, directed by Arthur Constant Lunn. Typescript.

1917 Minima of functions of lines. PhD dissertation, University of Chicago, directed by Gilbert Ames Bliss. Private edition, 1920, distributed by the University of Chicago Libraries, reprinted from *Trans. Amer. Math. Soc.* 21:357–83.

Publication:

1920 Minima of functions of lines. *Trans. Amer. Math. Soc.* 21:357–83. Published version of PhD dissertation. Review: *JFM* 47.0383.01 (E. Hellinger) 47:383. Presented by title to the AMS, New York City, 30 Oct 1920; abstract: *Bull. Amer. Math. Soc.* 27:100 #3.

Abstracts not listed above:

1922 Infinite series in the theory of potential. *Amer. Math. Monthly* 29:189 #2. Presented to the MAA, Georgetown, KY, 8 Apr 1822.

1927 Some remarks on functional calculus. *Amer. Math. Monthly* 34:173 #1. Presented to the MAA, Berea, KY, 8 May 1926.

1930 Queen Dido's problem. *Amer. Math. Monthly* 37:400 #7. Presented to the MAA, Lexington, KY, 15 Apr 1930.

References to: AmMSc 5–7; AmWom 1935–40.

“Dr. LeSturgeon Deceased at 90.” *Bridgeton (NJ) Evening News*, 8 Feb 1971.

“Dr. Le Sturgeon Dies in New Jersey.” *Lexington (KY) Leader*, Feb 1971.

Other sources: Master's thesis educational brief 1913; Center for Research Libraries College Catalog Collection; San Antonio Public Library; communications with Bridgeton (NJ) Public Library, Georgetown College Archives, Longwood University Archives, and with University of Kentucky Archives; Graham Meredith LeSturgeon and Lawrence Fontaine LeSturgeon, *The LeSturgeon Family Book* (Columbus, Ohio: 1989); E. J. McShane, “Recent Developments in the Calculus of Variations,” in *Semicentennial Addresses of*

the American Mathematical Society (New York: American Mathematical Society, 1938), 69–97; Morris Kline, *Mathematical Thought from Ancient to Modern Times* (New York: Oxford University Press, 1972); [“Women at the University of Virginia”](#); US Census 1880 VA, 1910 KY, 1920 MN, 1930 KY; New Jersey death certificate; SSDI.

Last modified: March 8, 2009.