TURNER, Bird M. April 18, 1877-September 5, 1962.

West Virginia University (BA 1915, MA 1917), Bryn Mawr College (PhD 1920).

Bird Margaret Turner was the second child and first of four daughters of Mary Jane (Douglas) (1847–1917) and John Marion Turner (1838–1910). Her parents were natives of Virginia (West Virginia after statehood in 1863) and married in 1873. Her father was a farmer in the Moundsville area in the northwest panhandle of West Virginia from before her birth in Moundsville until his retirement. Her brother, Will D., was two years older than she, and her three sisters were Lulu (1879–1953), Carrie (b. 1881), and Dess (1887–1949).

Bird Turner graduated from the Moundsville high school in 1893 and taught in the Moundsville area for most of the next two decades. She taught at Wood Hill school, a county grade school, 1895–96, and in Moundsville 1896–1900, where she taught fourth, seventh, and eighth grades. She taught mathematics in the Moundsville high school 1900–1913. Starting in 1900 she took summer courses toward her undergraduate degree: at West Virginia University in 1900, at Harvard University in 1907, at Bethany College in West Virginia in 1909 (spring and summer), and again at West Virginia University in the summers 1910, 1912–14. She was a student assistant at West Virginia University 1913–15 and received her BA there in 1915, at age thirty-eight, with majors in mathematics and physics. She was a member of the social sorority Kappa Kappa Gamma and the English club and won the Chi Omega prize in economics. Turner was an instructor in the summer school at West Virginia University in 1915, returned to Moundsville as principal of the high school for the year 1915–16, and was instructor in the summer school at West Virginia again in the summer of 1916.

Turner began her graduate work as a scholar in mathematics at Bryn Mawr College in the academic year 1916–17. During that first year she took a "seminary" in differential geometry, one in formal algebra, one in education, and the journal club in mathematics. She was granted the (honorary) President M. Carey Thomas European fellowship for her first year's work. She received her master's degree from West Virginia University in 1917 and was assistant director of the Phebe Anna Thorne Model School of Bryn Mawr College 1917–18; she lists the Model School as her affiliation for the January 1920 MAA meeting in New York City. Turner was a reader in mathematics at Bryn Mawr College during 1918–19, and, as a resident fellow during 1919–20, she finished her dissertation under the direction of Charlotte A. Scott. While at Bryn Mawr, she had studied under Scott, Olive C. Hazlett, Anna Johnson Pell (Wheeler), and Matilde Castro. Turner was Scott's sixth, and next-to-last, PhD student and was forty-three when she received her doctorate. Between the ages of forty-five and fifty-two she published three articles in the American Journal of Mathematics and two in the Annals of Mathematics.

Turner was an instructor at the University of Illinois for three years after she received her PhD in 1920. In 1923 she returned to West Virginia University, and in November of the following year she gave a talk at the organizational meeting of the West Virginia Academy of Science. She was assistant professor 1923–25, associate professor 1925–31, and professor 1931–47. In 1947, at age seventy, she retired as professor emeritus. A colleague at West Virginia University was Margaret Buchanan Cole, who had also received a BA from West Virginia and who overlapped with Turner in her studies at Bryn Mawr before receiving her PhD in 1922.

Four years after her retirement, Turner returned to Moundsville, where she was a member of the Moundsville Presbyterian Church and the Moundsville Women's Club. She was a Republican. Bird Turner died in her home in Moundsville, West Virginia, at age eighty-five in 1962. She was survived by nieces and nephews and was buried in Mt. Rose Cemetery in Moundsville.

Organizational affiliations: AMS, MAA (charter member), AAAS, Phi Beta Kappa.

## Dissertation:

1920 Plane cubics with a given quadrangle of inflexions. PhD dissertation, Bryn Mawr College, directed by Charlotte Angas Scott. Printed version, 1922, reprinted from Amer. J. Math. 44:261–78.

## **Publications:**

**1922a** On the positions of the imaginary points of inflexion and critic centers of a real cubic. *Ann. of Math.* 2nd ser., 23:287–91. Reviews: *JFM* 49.0462.01 (G. Feigl); *Rev. semestr. publ. math.* 31, pt. 2: 17 (W. A. Wythoff).

**1922b** Plane cubics with a given quadrangle of inflexions. *Amer. J. Math.* 44:261–78. Published version of PhD dissertation. Reviews: *JFM* 48.0731.01 (W. Fr. Meyer); *Rev. semestr. publ. math.* 31, pt. 1: 2 (E. B. Cowley).

1924 Plane cubics associated with the quadrangle-quadrilateral configuration. Ann. of Math. 2nd ser., 26:47–58. Reviews: JFM 50.0431.04 (G. Feigl); Rev. semestr. publ. math. 32, pt. 1: 20 (E. B. Cowley).

**1925** A configuration of thirteen pencils of cubics and cubics with three real inflexions. *Amer. J. Math.* 47:149–62. Reviews: *JFM* 51.0514.01 (W. Fr. Meyer); *Rev. semestr. publ. math.* 32, pt. 1: 2–3 (E. B. Cowley).

**1930** An application of the Laguerre method for the representation of imaginary points. *Amer. J. Math.* 52:75–84. Review: *JFM* 56.0556.07 (M. Zacharias).

## Presentation not listed above:

A configuration of pencils of cubics. Presented to the West Virginia Acad. Sci., Morgantown, WV, 28 Nov 1924.

**References to:** AmMSc 4–8, 9P–10P; AmWom 1935–40; BioWMath; Poggendorff 6, 7b. "Dr. Turner Dies at Moundsville." *Morgantown (WV) Post*, 6 Sep 1962.

"Dr. Bird Turner, Veteran Teacher, Died Suddenly." Moundsville (WV) Echo, 7 Sep 1962.

Other sources: PhD dissertation vita 1922; Owens questionnaires 1937, 1940; Bryn Mawr College Archives; communication with West Virginia University Archives; Kenschaft, "The students of Charlotte Angas Scott"; US Census 1880, 1900, 1910, 1920 WV.

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