## Fine, Henry Burchard | Encyclopedia.com

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(b. Chambersburg, Pennsylvania, 14 September 1858; d. Princeton, New Jersey, 22 December 1928)

mathematics.

Fine was the son of Lambert Suydam Fine, a Presbyterian minister. After the death of his father, his mother settled in Princeton, where Fine attended the university. During Fine's undergraduate years, his interest in mathematics was awakened by the young instructor George Halstead, who promoted the study of <u>non-Euclidean geometry</u> in the <u>United States</u>. After a year as an assistant in physics and three years as a mathematics tutor at Princeton (1880-1884), Fine, like many of his colleagues, went to Germany to study. At Leipzig he attended <u>Felix Klein</u>' lectures and in 1885 wrote a dissertation on an algebraic geometric problem suggested by Eduard, with whom he became friendly. After a summer in Berlin attending <u>Leopold Kronecker</u>' lectures, Fine returned to Princeton, where he taught mathematics until his death. In 1888 Fine married Philena Forbes.

In 1903, <u>Woodrow Wilson</u>'s first year in the presidency of Princeton, Fine was appointed dean of the faculty; and when Wilson resigned to run for Governor of <u>New Jersey</u>, Fine acted as president of the university until a successor was named in 1912. He then became dean of the departments of science, a post he held until his death. Fine was a founding member of the American Mathematical Society in 1891 and its president in 1911-1912.

Fine's impact on science lies mainly in his support of science and mathematics at Princeton. As dean of the faculty he promoted the mathematics Luther Eisebhart and brought in Oswald Veblen, G.A. Bliss, George Birkhoff, and J.H.M. Wedderburn. A professorship of mathematics and a mathematics building at Princeton were named for Fine.

Among his few contributions to mathematics were an expansion of his dissertation; several papers on differential equations; and most important, a paper on Newton's method of approximation (1916) and an exposition of a theorom of Kronecker's on numerical equations (1914). Fine was the author of several undergraduate textbooks and an exposition of the <u>number system</u> of algebra.

## BIBLIOGRAPHY

For a complete bibliography of Fine's publications and related secondary sources. see "Henry Burchard Fine," in *American Mathematical Society Semicentennial Publication*, *I*(<u>New York</u>, 1938), 167-169. Also consult Oswald Veblen, "Henry Burchard Fine," in *Bulletin of the American Mathematical Society*, **35** (1929), 726-730.

C. S. Fisher