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(*b*. Independence, Iowa, 22 January 1874; *d*. Harlingen, Texas, 17 January 1954)

mathematics.

The son of Campbell and Lucy Tracy Dickson, Leonard Eugene Dickson had a distinguished academic career. After graduating with a B.S. in 1893 as class valedictorian from the University of Texas, he became a teaching fellow there. He received his M.S. in 1894. With the grant of a fellowship he then proceeded to the newly founded University of Chicago, where he received its first doctorate in mathematics in 1896. He spent the following year in postgraduate studies at Leipzig and Paris.

Upon his return to the United States, Dickson began his career in mathematics. After a one-year stay at the University of California as instructor in mathematics, in 1899 he accepted an associate professorship at the University of Texas. One year later he returned to the University of Chicago, where he spent the rest of his career, except for his leaves as visiting professor at the University of California in 1914, 1918, and 1922. He was assistant professor from 1900 to 1907, associate professor from 1907 to 1910, and professor from 1910 to 1939. He married Susan Davis on 30 December 1902; their children were Campbell and Eleanor. At the university his students and colleagues regarded him highly as a scholar and a teacher. He supervised the dissertations of at least fifty-five doctoral candidates and helped them obtain a start in research after graduation. In 1928 he was appointed to the Eliakim Hastings Moore distinguished professorship.

Dickson was a prolific mathematician. His eighteen books and hundreds of articles covered many areas in his field. In his study of finite linear groups, he generalized the results of Galois, Jordan, and Serret for groups over the field of p elements to groups over an arbitrary finite field. He gave the first extensive exposition of the theory of finite fields, wherein he stated and proved for $m = 2, 3$ his modified version of the Chevalley theorem: For a finite field it seems to be true that every form of degree m in $m + 1$ variables vanishes for values not all zero in the field. In linear algebra he applied arithmetical concepts and proved that a real Cayley division algebra is actually a division algebra. He also expanded upon the Cartan and Wedderburn theories of linear associative algebras. He studied the relationships between the theory of invariants and number theory.

While he believed that mathematics was the queen of the sciences, he held further that number theory was the queen of mathematics, a belief that resulted in his monumental three-volume *History of the Theory of Numbers*, in which he investigated diophantine equations, perfect numbers, abundant numbers, and Fermat's theorem. In a long series of papers after 1927 on additive number theory, he proved the ideal Waring theorem, using the analytic results of Vinogradov.

Dickson received recognition for his work. The American Mathematical Society, for which he was editor of the *Monthly* from 1902 to 1908 and of the *Transactions* from 1911 to 1916, honored him. He was its president from 1916 to 1918 and received its Cole Prize in 1928 for his book *Algebren und ihre Zahlentheorie*. Earlier, in 1924, the American Association for the Advancement of Science awarded him its thousand-dollar prize for his work on the arithmetic of algebras. Harvard in 1936 and Princeton in 1941 awarded him an honorary Sc.D. In addition to his election to the National Academy of Sciences in 1913, he was a member of the American Philosophical Society, the American Academy of Arts and Sciences, and the London Mathematical Society, and he was a correspondent of the Academy of the French Institute.

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A. A. Albert, "Leonard Eugene Dickson 1874–1954," in *Bulletin of the American Mathematical Society*, **61** (1955), 331–346, contains a complete bibliography of Dickson's writings.

Ronald S. Calinger