

DERRICK NORMAN LEHMER—IN MEMORIAM

After thirty-seven years of service in the department of mathematics at the University of California, Professor Derrick Norman Lehmer died on September 8, 1938. He came to the University of California in 1900, just after receiving the degree of Doctor of Philosophy at the University of Chicago. All of his academic career was therefore spent at California. He retired in 1937, apparently in robust health and with plans and ambitions for a life of continued activity with numerous interests, to all of which he had productively contributed.

Born in Indiana, July 27, 1867, he graduated in 1893 from the University of Nebraska, from which he also received the degree of Master of Arts in 1896, and the honorary degree of Doctor of Science in 1932. He married Clara Eunice Mitchell in 1900, and three daughters and two sons were born to them. One of the sons, D. H. Lehmer, followed in the footsteps of his father and is now an assistant professor of mathematics at Lehigh University.

Apart from mathematics he evidenced great interest and ability in both poetry and music. This was shown by his membership in numerous literary organizations accorded only to those who had indicated productive ability; by his editorship of the *University of California Chronicle*, devoted to the publication of articles of a literary character; and by numerous contributions of his own, mostly in the field of poetry.

His membership in honorary and learned societies included Phi Beta Kappa, Sigma Xi, the American Mathematical Society, the Mathematical Association of America, the *Circolo Matematico di Palermo*, and the American Association for the Advancement of Science, of which he was a fellow.

For a number of years he devoted much of his spare time to creative music, and was particularly interested in the music of western Indians, producing two operas based on Indian themes, "The Harvest" and "The Necklace of the Sun." In addition to these he wrote and produced a number of songs based on Indian legend and musical themes.

His earlier mathematical interests lay in the field of synthetic projective geometry and the theory of numbers; indeed, the latter subject continued to occupy Lehmer's attention throughout his entire career.

He found in rational numbers a fascination which lasted throughout his life. Primes, residues, quadratic forms, divisors of forms, continued fractions and their generalizations were seldom absent from his thoughts. Above all, the problem of factoring never failed to exert its appeal. The abstruse results of higher theory can be made to contribute to that tantalizing problem, though not yielding a complete solution. Such a situation was of the kind to especially attract him, and a large number was always a challenge. The possibility of experimental verification of a theorem or of a conjecture so often present in the theory of numbers led him to seek to increase the material available for such verification and so to extend and correct the factor table. This was the largest and most finished of his undertakings.

His table giving the least divisors of the first ten million numbers is a monument of accuracy and judgment. Others, notably Dase, Burckhardt, Glaisher, had labored successfully and had set a standard which he surpassed. This work occupied his available time for about nine years. Lehmer was not a computer, such as were Dase or Burckhardt, but like Glaisher, a mathematician, alive to the significance of theory and viewing the table as a contribution to it.