

CHARLES LEONARD BOUTON*

A MINUTE READ BEFORE THE FACULTY OF HARVARD UNIVERSITY

March 28, 1922

Charles Leonard Bouton was born in St. Louis, Missouri, April 25, 1869. His father, William Bouton, was of Huguenot descent, and the family was long established in New England. At the close of the Civil War, William Bouton settled in St. Louis, where his regiment had been disbanded. Charles's mother, Mary Rothery Conklin, was also of old American stock; her grandparents were Scotch. William Bouton was an engineer by profession. His grandfather is said to have been the projector of the Erie Railroad, and was the author of the first article on its construction. Charles was the only one of the four sons who did not follow in his father's footsteps. The home atmosphere was academic and intellectually stimulating.

Bouton received his early education in the public schools of St. Louis, and took his first degree, that of Master of Science, at Washington University in 1891. Here, he came under the instruction of a highly skilled teacher of descriptive geometry, Dr. Edmund Arthur Engler. The next two years were given to teaching in Smith Academy, St. Louis, and these were followed by a year as instructor in Washington University, part of his work being to assist Professor Henry S. Pritchett. His next, and as it turned out, his last move was to Harvard. The years '94-'95 and '95-'96 were spent in the Graduate School. He took the master's degree at the end of the first year, and at the end of the second he was awarded a Parker Fellowship for study abroad. His two years at Leipzig were most profitably spent. He chose as his master that most original geometer, Sophus Lie, then at the height of his fame. As a matter of fact, Bouton was one of the great Norwegian's last pupils, for Lie returned to Norway in 1898 and died soon after. All of Bouton's subsequent scientific work bore the clear impress of Lie's genius. His two advanced courses, which he originated soon after his return to Harvard, dealt respectively with the theory of geometrical transformations and the application of transformation groups to the solution of differential equations. The graduate students who subsequently had the good fortune to prepare for the doctorate under his care generally took up subjects connected with the theory of transformations.

After receiving the doctorate at Leipzig in 1898 Bouton returned to Harvard and began a long period of work, broken only by occasional sabbatical absence. He threw himself with the greatest zeal into his duties as a teacher. At one time or another, beside the alternating advanced courses mentioned, he taught nearly every one of the lower and

* Professor Charles Leonard Bouton died on February 20, 1922. See this BULLETIN, vol. 28, p. 82 (Jan.-Feb., 1922).

middle group courses in mathematics. No pains were too great for him to spend, either on the preparation of lectures or on helping the individual student, whether a Freshman or a candidate for the doctor's degree. His characteristic quality of scientific sanity was invaluable, for it led him always to emphasize that which was permanently important, and to avoid tinsel and sham. A fine example of his didactic sense is seen in a collection of problems on the construction of Riemann's surfaces, published in volume 12 (1898) of the *ANNALS OF MATHEMATICS*. He was equally successful in arousing the interest of a beginner by showing him a model or a diagram or an enlightening example of a new theory, and in guiding a graduate with sure hand toward researches of permanent value and importance.

Those qualities which made Bouton an admirable teacher were conspicuous in his other professional activities. He was an editor of the *BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY* from 1900 to 1902, and an associate editor of the *TRANSACTIONS* of the same society from 1902 to 1911. His power of keen yet kindly criticism, and his unerring mathematical judgment made him an efficient referee. His advice was prized by all who knew him, his opinion was always heard with respect, and his sanity was no less remarkable than his unselfishness. All of these qualities were drawn upon in full measure in the autumn of 1918 when, almost overnight, he was called to organize the mathematical instruction of nearly a thousand men in the Students' Army Training Corps. He carried this work through with conspicuous success, and the leading teachers of mathematics in the schools of this community, who enthusiastically rallied to the support of Harvard and the nation in that crisis, found in him a helpful guide and an efficient administrator.

His home life was beautifully quiet and peaceful. In 1907 he married Mary Spencer of Baltimore, and she, with their three daughters, Elizabeth, Margaret, and Charlotte, survives him. Yet for some time before the end, long dark shadows were crossing his life. The persistent after-effects of a hurried operation for appendicitis seemed to sap his strength. Family cares and anxieties multiplied, reaching a crisis in 1918 with the death of his youngest child. His breakdown in 1921 seemed but the inevitable end toward which events had long been tending. His death deprived the university of a faithful servant, and the community of a single-minded and upright gentleman.

WILLIAM F. OSGOOD
(Signed) JULIAN L. COOLIDGE
GEORGE H. CHASE
Committee.

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