

THOMAS HAKON GRONWALL—IN MEMORIAM

With Thomas Hakon Gronwall, who died in New York May 9, 1932, the Society has lost one of its most colorful personalities. By training, habit, and preference a mathematician to whom no chapter of mathematics was a closed book, he could hold his own with physical chemists, and had made a living as a civil engineer specializing in structural steel.

Hakon Tomi Grönwall was born January 16, 1877, at Dylta Bruk in the parish of Axberg in central Sweden. In 1893 he entered the University of Uppsala, but transferred to Stockholm the following year. He was attracted to Stockholms Högskola* by the vigorous and flourishing mathematical school which centered around Mittag-Leffler and which contained among its members mathematicians like Bendixson, Fredholm, von Koch, and Phragmén. That he thrived in this stimulating atmosphere is shown by the ten papers which he wrote in 1895–8†; their range is typical for the broadness of his mathematical interests. He received his doctor's degree at Uppsala at the age of 21; his thesis is [7] in the Bibliography at the end of this obituary. He left Stockholm and Sweden, probably in 1899, owing to a student's prank which was treated by the authorities, sadly lacking in sense of humor, in a way which hurt his youthful pride and his strong love of liberty.

Gronwall now started a completely new chapter. He studied engineering in Berlin, received his degree at the Charlottenburg Technische Hochschule in 1902, and began practising. From 1904 onwards he seems to have been located in this country. Very little is known about this period in Gronwall's life. He was apparently a rolling stone, stopping at the various steel works for longer or shorter periods. He was connected with the American Bridge Co., the Pennsylvania Railroad, and other engineering companies.

In 1911 he lived in Chicago and was evidently ready to make another right-about-face, but now back to his old love. Somehow he managed to keep up with the development in mathematics, so that when he made his spectacular come-back in 1912, it was as a full-fledged mathematician. A number of papers accepted for publication by leading periodicals during the spring of 1912 gave him a desirable confidence in his own abilities. Gronwall made his first appearance before the Society at the Chicago meeting on April 5 and 6, 1912, in which he took a prominent part; and he became a member of the Society during the same month. We can date his return to mathematics from these events.

* High school is not a correct translation of the Swedish word *Högskola*. In the nineties Stockholms Högskola was essentially a research institute in mathematics and the natural sciences though lacking most of the equipment now-a-days considered necessary for such a task. The student body was small but select. No examinations were held nor degrees given until 1909; a student who desired such baubles had to run the gauntlet at Uppsala. Students who could work under such handicaps had to be earnest seekers of truth.

† These papers are signed H. Grönwall, all later papers have the signature T. H. Gronwall.