DAVISON, Charles (1828-1942), mathematician and writer on seismology, was born 1 May 1838 in Bishopsworth, county Durham, the second son of Edwin Charles Davison, fleet paymaster, Royal Navy, and his wife Elizabeth, daughter of Joseph L. Spence of Swayfield, Lincolshire. He went to the College of Physical Science (later Armstrong College), Newcastle upon Tyne (1837-47), and then to Emmanuel College, Cambridge (1837-81), where he became a scholar in 1879. He obtained a BA in mathematics (thirteenth wrangler) in 1881 and an MA in 1883.

In January 1884 he became senior mathematics master at Blairloch School, Stirlingshire; in January 1885 he was appointed mathematical master (later head of mathematics) at King Edward's High School, Birmingham, where he remained until his retirement in March 1920. Between 1802 and 1931 he wrote nine mathematical textbooks for schools (one as co-author with R. Levett and one with C. H. Richards), covering aspects of plane and solid geometry, trigonometry, algebra, and calculus.

However, Davison was best known for his work as a writer on the history of British earthquakes and seismology in general. In his day he was regarded as one of the principal authorities and his bywords: The British Earthquakes of 1886 (1886); A Study of Recent Earthquakes (1905); The Origin of Earthquakes (1911); A Manual of Seismology (1921); A History of British Earthquakes (1924); The Founders of Seismology (1927); The Japanese Earthquakes of 1923 (1931); and Great Earthquakes (1935) remained useful sources of reference. He also published numerous papers in Nature, the Philosophical Magazine, the Philosophical Transactions of the Royal Society, and the Bulletin of the Seismological Society of America. A constant theme throughout his writing, but particularly emphasized from 1928 onwards, was identification of periodicity in patterns of earthquake shock occurrence. This work was summarized in his Studies on the Periodicity of Earthquakes (1938).

Like Sir Arthur Schuster (q.v.), Davison was one of the first to apply the analytical technique of Fourier analysis; and he claimed to have found evidence of diurnal, 148- and 296-day lunar effects, in addition to 11-, 14-, and 19-year periods. However, later data obtained using very sensitive, continuous, recording techniques offered little evidence in support of periodic seismic effects.

Despite a shy and diffident manner, Davison was a hard-working and gifted teacher of endless patience. Among his pupils were the last two senior wranglers (A. W. Ibbotson and J. P. Daniel) before the rank was abolished. In 1894 he became secretary to the British Association seismological committee for study of earth tremors and the following year he and the seismologist John Milne (q.v.), newly returned from his pioneering work in Japan, became joint secretaries of its newly established subcommittee for seismological investigation, until Davison retired from this position in 1899. He had become Sc.D. (Cambridge) in 1896.

In 1888 he married Margaret Blanche, daughter of James Harris, schoolmaster, of Great Chart, Ashford, Kent; they had one son and two daughters. Davison died in Cambridge, where they lived following his retirement, 28 April 1940. (Archives of King Edward's High School, Birmingham.)

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