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(*b*. Lewisham, Kent, England, 5 November 1848; *d*. Cambridge, England, 7 December 1928)

mathematics, astronomy.

Glaisher was the eldest son of James Glaisher, an astronomer who was also interested in the calculation of numerical tables. His given names were derived from those of his father and his father's colleagues in the founding of the British Meteorological Society, S. C. Whitbread and John Lee.

Glaisher attended St. Paul's School, London (1858–1867), and Trinity College, Cambridge, where he graduated as second wrangler in 1871. Elected to a fellowship and appointed an assistant tutor at Trinity, he remained there the rest of his life. He never married.

A tall, slim, upright man who retained good health until his last few years, Glaisher enjoyed walking, bicycling, collecting, travel (often in the United States), and teaching as well as mathematical research and participation in the meetings of scientific societies. He became an authority on English pottery, writing parts of several books on the subject and leaving his fine collection to the Fitzwilliam Museum, Cambridge. Glaisher was active in the British Association for the Advancement of Science, as president in 1900 and as a member of several committees. He was the "reporter," as well as a member—along with A. Cayley, G. G. Stokes, W. Thomson, and H. J. S. Smith—of the Committee on Mathematical Tables. Its 175-page *Report*, containing much historical and bibliographical data, appeared in 1873.

Glaisher's honors included memberships in the councils of the Royal Society (for three different periods), the London Mathematical Society, and the Royal Astronomical Society (from 1874 until his death), as well as the presidency of the last two societies. Cambridge University awarded him the new D.Sc. degree in 1887, and Trinity College of Dublin and Victoria University of Manchester awarded him honorary D.Sc. degrees. Glaisher was an honorary fellow of the Royal Society of Edinburgh, of the Manchester Literary and Philosophical Society, and of the National Academy of Sciences, Washington. He was awarded the De Morgan Medal of the London Mathematical Society in 1908 and the Sylvester Medal of the Royal Society in 1913.

Glaisher's first paper typified three of his continuing interests: special functions, tables, and the history of mathematics. It was written while he was an undergraduate and was communicated to the Royal Society by Arthur Cayley in 1870. It dealt with the integral sine, cosine, and exponential functions and included both tables which he had calculated and much historical matter. Glaisher's first astronomical paper also typified his interest: "The Law of the Facility of Errors of Observations and on the Method of Least Squares," published in the *Memoirs of the Royal Astronomical Society* for 1872. This paper was inspired by a historical note in an American journal giving Robert Adrain credit for the independent discovery of Gauss's law of errors. A. R. Forsyth labels it, along with a paper on Jacopo Riccati's differential equation and one on the history of plus and minus signs, as "classical."

Glaisher published nearly 400 articles and notes but never a book of his own. The nearest he came was the Report noted above, the *Collected Mathematical Papers of Henry John Stephen Smith*, which he edited, and volumes VIII and IX of the *Mathematical Tables* of the British Association for the Advancement of Science, published in 1940. The latter were revisions and extensions of number theoretical tables (divisors, Euler's Φ function and its inverse, and others) which he had completed in 1884.

Glaisher served as editor of two journals, *Messenger of Mathematics* (1871–1928) and *Quarterly Journal of Mathematics* (from 1878 until his death). G. H. Hardy wrote, "A generation of well known English mathematicians began their careers as authors in the *Messenger*." and stated that Glaisher was "... underestimated as a mathematician. He wrote a great deal of very uneven quality, and he was old-fashioned, but the best of his work is really good." He applied to number theory, especially to representations by sums of squares, the properties of special functions, especially elliptic modular functions.

Glaisher's interest in students and publications affected American mathematics. He befriended an American student at Cambridge, Thomas S. Fiske, and took him to meetings of the London Mathematical Society. When he returned to Columbia University, Fiske organized the New York Mathematical Society (later the American Mathematical Society) in 1888 and copied the format of the *Messenger* when the *Bulletin of the New York Mathematical Society* was initiated.

Forsyth's characterization of Glaisher as "a mathematical stimulus to others rather than a pioneer" seems sound.

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II. Secondary Literature. A. R. Forsyth published a biography in *Journal of the London Mathematical Society*, **4,** pt. 2, no. 14 (Apr. 1929), 101–112, repr. in *Proceedings of the Royal Society*, **126A,** no. A802 (22 Jan. 1929), i–xi, with a portrait facing p. i. Forsyth also wrote the biography in *Dictionary of National Biography. 1922–1930* (London, 1937), pp. 339–340, which records that there is a pencil drawing of Glaisher by Francis Dodd in Trinity College, Cambridge.

See also H. H. Turner, "James Whitbread Lee Glaisher," in *Monthly Notices of the Royal Astronomical Society*, **89** (Feb. 1929), 300–308; and G. H. Hardy, "Dr. Glaisher and the Messenger of Mathematics," in *Messenger of Mathematics*, **58** (1929), 159–160.

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