

## **BONNEY, Thomas George (1833–1923)**

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Thomas Bonney was born in Rugeley, Staffordshire, on 27 July 1833 and died in Cambridge on 10 December 1923. He was eldest of the ten children of the Revd Thomas Bonney, Master of Rugeley Grammar School. Educated at Uppingham school, Rutland, Bonney entered St. John's College, Cambridge, in 1852, reading for the Mathematical and Classical Tripos. He graduated BA in 1856 and became mathematics master at Westminster School, London. Taking Holy Orders in 1858, he thereafter regularly preached in both Cambridge and London, and was respected as a moderate Broad Church theologian.

In 1861 Bonney returned to St. John's as Junior Dean and successfully fought for the Natural Sciences Tripos (previously only open to BAs) to be offered as a first degree. He became Tutor in 1868 and Lecturer in Geology in 1869. As Adam SEDGWICK approached retirement, Bonney, a gifted and devoted teacher, took over virtually all his teaching. In 1873 he introduced an innovative course on microscopical petrography (examination of thin sections of rocks using the polarising microscope).

Bonney's teaching load adversely affected his publication of research, and he narrowly missed election to Sedgwick's chair in 1873. In 1877 he was appointed to the Yates-Goldsmid Chair of Geology at University College, London, but the position lacked adequate funding. Bonney had to augment his income through being Secretary of the British Association (1881-5), literary work, and writing a regular column for the *Standard* newspaper (1897-1905); and to rely on unpaid assistants (e.g. Catherine RAISIN). He resigned, somewhat bitterly, in 1901. Returning to Cambridge in 1905, based at the Sedgwick Museum, he continued to teach (informally) into the 1920s. His students included Jethro TEALL, William SOLLAS, Alfred Jukes-Browne, Aubrey STRAHAN, Charles CLOUGH, John Marr, William Watts, and Frederick HATCH.

Bonney was awarded the Woollaston Medal of the Geological Society of London (1889), and honorary doctorates from Cambridge, Dublin, Sheffield and Montreal. He was elected FRS (1878) and was President of the Alpine Club (1883), Geological Society (1884-5), Mineralogical Society (1884-6), British Association (1910) and Vice-President of the Royal Society (1898-9). He published over 200 scientific papers and textbooks, plus works on travel, natural-history and theology.

Bonney strongly believed in applying inductive reasoning to derive geological theory from laboratory and field evidence. He was widely consulted for petrographic advice and always tried to visit the localities from which specimens came. His own fieldwork was conducted mainly in Britain and the Alps, which he visited thirty-five times (1856–1911). He was involved in contemporary debate regarding the nature of the Precambrian rocks of Britain. Some of his views were undoubtedly controversial. For example, he wrongly held that the formation of deep Alpine valleys pre-dated glacial action; glaciers, he believed, merely 'filed-down' rather than 'excavated' the rocks beneath them. He correctly recognised the fluvial origin of the Bunter Pebble Beds of the English Midlands and that diamonds found in the Kimberly mine, South Africa, probably originated at considerable depth from 'carbon ... in the earth's magma.' ('On Some Rock-Specimens from Kimberly', 1897, p. 501).

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