

The man who split the dinosaurs in two – Harry Govier Seeley¹

The talk was titled ‘On the Classification of the Fossil Animals Commonly Named Dinosaurs’ and it was given in 1887 by Harry Govier Seeley, Professor of Geology at King’s College, London. Seeley argued that the ‘terrible lizards’, which were becoming increasingly popular at the time, could be simply divided into two great groups – the Saurischia and the Ornithischia based on differences in their hip structure.

For 130 years Seeley’s fundamental division of the dinosaurs has stood the test of time – until now. New research by Cambridge palaeontologists Matt Barron, Dave Norman and Paul Barrett from London’s Natural History Museum has made a significant challenge to Seeley’s subdivision.

But who was Harry Govier Seeley? While everyone has heard of the dinosaurs, few people outside the small world of vertebrate palaeontologists have heard of him.

Seeley (1839-1909) was a talented, combative and somewhat idiosyncratic palaeontologist who opposed Darwinian evolution. Despite a difficult and financially insecure background, having been apprenticed to a pianoforte maker, Seeley attended T.H. Huxley’s lectures at the Royal School of Mines in London. His uncle, the bookseller Robert Benton Seeley, paid for him to train for the bar but Harry Seeley abandoned the law and studied English and maths at the Working Men’s College. He supported himself by copying documents in the British Museum library, where the palaeontologist Samuel Peckworth Woodward (1821-1865) encouraged him to study geology.

In 1859 Seeley entered Sidney Sussex College in the University of Cambridge (1859), suffered a mental breakdown in 1860 and migrated to St John’s College in 1868 but did not matriculate. It was during this time that Professor Adam Sedgwick hired Seeley as an assistant in the Woodwardian (now Sedgwick) Museum where for 10 years he lectured, catalogued fossils, arranged collections and published papers on the pterosaur fossils of the Cambridge Greensand.

In 1872 Seeley married, moved to London and held a succession of academic posts in the University and was elected a Fellow of the Royal Society in 1879. His early struggle to educate himself resulted in his strong support for the expansion of higher education, especially for women, and he taught for some years at Bedford College for Women, which was the first college for the higher education of women and had been founded in 1849.

One of Seeley’s major achievements was his published work (1888) on the classification of dinosaurs into two major groups the ‘bird-hipped’ Ornithischia and lizard-hipped Saurischia. This was the first of a ten-part

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series of papers on fossil reptiles in the *Philosophical Transactions of the Royal Society*. He also wrote successful popular books, including one on the pterosaurs called 'Dragons of the Air' (1901). Still an anti-evolutionist he wrote that 'there is no one continuous chain of life or gradation in complexity of structure of animals' (ibid. p.188).

Douglas Palmer, Sedgwick Museum



Harry Seeley, began as Sedgwick's assistant in the Museum and became an expert on pterosaurs and dinosaurs