
Book Review

The Peripatetic Astronomer: The Life of Charles Piazzi Smyth

H. A. Brück and M. T. Brück. Pp. xii + 274. Adam Hilger. 1988. Price £29.50. ISBN 0 85274 420 X.

Charles Piazzi Smyth (1819–1900) was one of the most colourful and controversial characters of nineteenth century British science. He was an astronomer, surveyor, spectroscopist, meteorologist, pioneer photographer, amateur artist, traveller and expert on the metrology of the pyramids; he was one of the last all

round natural philosophers. His early interest and training in astronomy was due to his father, he received further training and experience under Thomas Maclear, His Majesty's Astronomer at the Royal Observatory, Cape of Good Hope, 1835–1845. He returned to Britain in 1846 as Astronomer Royal for Scotland and Professor of Practical Astronomy in the University of Edinburgh, posts he occupied until his retirement in 1888. Piazzi Smyth married Jessica Duncan in 1855, she was a well qualified geologist and assisted Piazzi Smyth on his travels and in many of his astronomic, spectro-

scopic and meteorological and metrological measurements for over 40 years.

In many ways he was far ahead of his time in that he recognised the importance of high altitude mountain sites as bases for astronomical observations. Indeed the Canary Islands which he chose as a location for some of his studies are now the site of a major international observatory. He was a pioneer in solar spectroscopy resolving and mapping many new features and making contributions to the identification of atmospheric absorption effects, work which led him to "rainband spectroscopy," an early example of

remote sensing. Piazzi Smyth also made high resolution terrestrial measurements using Rutherford and also Rowland gratings. His analysis of the green band of CO in collaboration with A. S. Herschel and their discovery of the "harmonic law" was another historic spectroscopic advance. Piazzi Smyth's preoccupation with the mystic cult of the Great Pyramid led to his resignation from the Royal Society of London and tarnished his reputation with some, but not all, of his scientific contemporaries. The present text puts this less rational aspect of his work in context with his more important scientific studies and

allows the reader to form a balanced view of Piazzi Smyth's life and work. This is the first full length biography and is based on a detailed study of his unpublished journals as Astronomer Royal as well as his numerous research papers and books. This scholarly text is well illustrated, indexed and referenced. Many of the illustrations are taken from the journals and papers and show his talent as an artist and draughtsman. Also included are some of his early photographic studies of remarkable quality. The authors are to be congratulated on bringing to our attention an underrated and overlooked yet clearly

important Victorian astronomer/spectroscopist in a charming manner. He is not without a memorial, since 1861 the Edinburgh 1 o'clock time gun reminds those who know of its institutor, Charles Piazzi Smyth. The book is warmly commended, you will be left with the feeling you met the man and now understand many of his problems in building up and sustaining the scientific efforts of the Edinburgh Observatory.

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