
Robert Hooke is known to most physicists as the discoverer of the relationship between tension and extension of an elastic body and expressed by him in the Latin expression, *Ut tensio sic vis*, or “as the tension so the extension”. In fact Hooke’s achievements were far more extensive than this as explained by the author of this book, a professional historian of science at Oxford.

After a short preface and some acknowledgements there are 14 chapters each descriptive of a different aspect of Hooke’s life and work. There is also a centre section which consists of 33 plates and 3 portraits, all in black-and-white and taken from original documents.

The first two chapters contain genealogical data on Hooke’s origins and family connections. It appears that his father was a curate at Freshwater, a small town on the Isle of Wight. The family was apparently not wealthy, and Hooke entered Westminster School in London as a poor scholar. Evidently there were influential family friends and eventually Hooke found a place at Christ Church college, Oxford, as a servitor: a student paying his way by giving service to a richer contemporary.

Eventually, by means not very apparent from the book, Hooke obtained the M.A. degree and migrated to London. This migration was in part due to his Oxford association with Robert Boyle in the capacity of research assistant.

Hooke’s experimental abilities were exceptional and included not only the study of gases with Boyle but of the possibility of flight and the effects of vacua on sound and on live animals. Hooke was a keen anatomist and, on occasion, a vivisectionist.

At about this time Hooke became “Curator of Experiments” to the fledgling Royal Society of which he eventually became a Fellow and an official.

Hooke’s earliest published work was his *Micrographia* in which his observations on such things as plant and insect structure were made with the recently invented simple and compound microscopes.

Alongside all of this work was a great, and continuing, interest in astronomy and in horology. Both, in part, generated by the then-current importance of position finding in navigation. Of especial note is the use of deep wells to enable very long focal-length lenses to be used as telescope objectives: the observer lying on his back at the bottom of the well!

In due course Hooke became Professor of Geometry at Gresham College, London. He was also appointed Surveyor to the City of London, an important and remunerative post of great importance during the rebuilding which followed the Great Fire of London on September 1666. In this work he was closely associated with Sir Christopher Wren; in fact, some buildings attributed to Wren may have been designed by Hooke.
Considerable space is given to the feud between Hooke and Isaac Newton in which the rather unpleasant nature of Newton is illuminated. Perhaps the most interesting revelation is a quotation from a letter from Hooke to Newton, written on 6th January 1679 (p. 207 of the book) in which he clearly states that, “The Attraction is in a duplicate proportion to the Distance from the Centre Reciprocal,” a clear intimation that Hooke’s studies of gravitational attraction had led him to the inverse-square law which Newton later published as his own invention!

These are only a few of the enormous number of Hooke’s inventions that make it obvious he deserves far more renown than he is usually given.

The book also contains extensive bibliographical notes and a good index. Only one comment and suggestion comes to mind: it is a great pity that the author did not describe and discuss the illustrations, most of which are assembled together in the middle of the book. Otherwise, this is a fine book and can be thoroughly recommended.

Andrew D. Booth  
Sooke, British Columbia, Canada