Adams's rich, satisfying and beautifully illustrated book will be of use to historians of medicine and architecture, as well as scholars whose interests include the relationships between institutional space and material culture. The greatest contribution of this book is the way in which it illuminates, in one building type, the complex relationships between design and space, traditionalism and modernism, gender and class, professionals and laypersons. It also sheds light on the profound changes to the very notion of health care during the years 1893–1943, an era of hospital architecture in Canada that has until now stood largely outside the lens of academic investigation. As such, the book makes a significant contribution to ongoing, interdisciplinary research in the entwined histories of architecture and medicine.

Cynthia Imogen Hammond,
Concordia University, Montreal

William H Brock, *William Crookes (1832–1919) and the commercialization of science*, Science, Technology and Culture, 1700–1945, Aldershot, Ashgate, 2008, pp. xxvii, 556, illus., £65.00 (hardback 978-0-7546-6322-5).

William Crookes figures less in the historiography of Victorian science than he should. He achieved much but is not tied to a single discovery or discipline. He was trained as a chemist, but much of his work lay at its boundaries with physics, on matters of spectra, electricity, and later radiation. On such matters Crookes (with the aid of a succession of under-recognized assistants, J Spiller, Charles Gimingham, and J H Gardiner, all masters of glassware) was an outstandingly talented experimenter—creative in isolating remarkable effects and testing hypotheses, capable of working at high levels of precision. The discovery of thallium in 1861 was Crookes's first great achievement; thereafter he was a central figure in the difficult distinguishing of the rare earths and the associated determination of atomic weights. He worked at the margins of public health as an investigator of disinfectants for the Cattle Plague Commission during the mid-1860s and later as an analyst of London's water, as a sewage treatment entrepreneur, and as an advisor on river pollution. He was prophetic on environmental matters and on future technology, bringing attention both to the need to fix nitrogen and to the awesome power of the new-found radiation. Crookes was also a psychical researcher, interested in undiscovered physical forces and, at one remove, matters of cosmology.

Beyond all this, he was a proprietor and an editor of journals, most notably the weekly *Chemical News* (in many ways modelled on the *Lancet*), and the *Quarterly Journal of Science* (at its best, an analogue to the *New Scientist*). Like the *Lancet*'s founder/editor Thomas Wakley, Crookes was an adroit publicist, a writer of delightfully iconoclastic leaders on innumerable subjects. He was often at the centre of controversy and kept his lawyers busy. But for the multiplicity of his interests, he might well have become a successful technical industrialist: he had an eye to the patentable, and a few of his investments in novel technologies were profitable, but most crashed (among them transmutation of base metals into gold). In any case he had little patience for systematic development or marketing, though in the case of sewage treatment he kept at it for an unusually long time. Though a superb lecturer at the Royal Institution, he was never a successful academic: independence and impatience would probably have precluded such a career. Finally, though his colleagues often kept him at some distance (only partly from discomfort with his spiritualism), he did become a London scientific insider, serving late in life as president of both the British Association and the Royal Society.

Brock's is a readable, well researched, doorstop biography—an exhaustive account of an exhausting life. He follows his subject across the Atlantic and into South Africa (Crookes had a strong interest in diamonds and

https://doi.org/10.1017/S002572730000404X Published online by Cambridge University Press

in gold). Brock has tracked down sources with a scrupulousness that goes far to compensate for the systematic destruction of many of Crookes's private papers. Parts of the book make demands on the reader as Brock takes us to the research front on many of Crookes's lines of investigation. The book's organization is broadly chronological, but Crookes's life does not lend itself to neat compartmentalization: though there are periods of concentrated activity, his major interests were long lasting.

The person behind the busy-ness is less clear. As well as lost sources, this reflects Crookes's lack of interest in contemporary culture and politics. He paid attention to public affairs impinging on technology (and contemplated standing for Parliament) but was not political; he was sociable but uninterested in the arts. Many have been struck by his credulity regarding spiritualism. This rigorous experimenter was unduly receptive to (or besotted by?) young ladies of uncommon sensitivity—so much so that he was marked as an easy target. But there was a burden of proof issue: he was sure that unknown forces existed and were expressed in psychic phenomena; the failings of individual mediums did not change that.

To link Crookes to the "commercialization of science" may mislead. His continuing interest in turning new knowledge to profit does distinguish him from independently wealthy Victorian scientists and from those who made livings teaching or in public service. In general, commercial success subsidized Crookes's research without compromising his reputation—matters of water and sewage are partial exceptions. But "commercialization" catches only one side of Crookes's role as midwife to new technology. From his bully pulpit as *Chemical News* editor Crookes opened or closed doors; it would be interesting to discover how far his technical visions affected home and colonial investment in Victorian hi-tech.

Christopher Hamlin,
University of Notre Dame

Jan Golinski, *British weather and the climate of Enlightenment*, Chicago and London, University of Chicago Press, 2007, pp. xv, 284, illus., £22.50, $35.00 (hardback 978-0-226-30205-8).

This superbly researched volume contains a lesson on how to make sense of the extraordinary importance of climate in modern history. With a new kind of climatological determinism embedded in global political agendas, a work of this kind performs a public service in reminding us about the social origins of "climate" and our infatuation with it. For example, early in the book, Golinski explains why thoughts about climate cannot be dissociated from thoughts about national character when, as was the case during the eighteenth century, Britons came to perceive themselves as polite, commercial and enlightened people. The previously disabling variability of maritime weather was recast in a language in which a mutable but temperate weather was a precondition of economic progress and the population's well-being. Central to the development of this new attitude were the activities of British weather observers, diarists, writers, and medical practitioners, who acknowledged the presence of environmental agency within social, psychological and biological levels of everyday life.

For example, the appearance of weather diaries in the late seventeenth century reflected the ways in which the educated classes reflected upon their identity within a providential and secular culture marked by a growing awareness of public time. For some of these individuals, the weather record testified the workings of God's hand; others used daily entries as a self-effacing means of personal development. But they all worked within the framework of temporal linearity which Golinski identifies as the precondition of our own understanding of the weather as an entity that can be observed at any time and any place.

https://doi.org/10.1017/S002572730000404X Published online by Cambridge University Press