

## Book Reviews

vapour pressure to the construction of an ether vaporizer and to the control of the strength of the vapour. He had quickly realized that the concentration was entirely temperature-dependent, and during the first three weeks of 1847 he confirmed the accuracy of Dalton's 1808 table of the SVP of ether, published his own version, and demonstrated his purpose-built vaporizer. In October 1847 he published his largely clinical textbook *On the inhalation of the vapour of ether*.

These papers contain a wealth of clinical observation, presented with such immediacy as to directly involve the reader in the events described. They record also Snow's subsequent researches into the fundamentals of anaesthetics, which virtually set an agenda to which we are still working, and included such "modern" topics as the uptake and mode of action of anaesthetics, and the relation of potency to blood solubility. All this work was performed not in some well-equipped university laboratory, but at his lodgings in Frith Street.

Snow's writings reached their peak in the last two papers, which demonstrate his erudition and provide evidence of his very wide reading. In December 1850, having shown that anaesthetized animals exhale less carbon dioxide, Snow deduced that anaesthetics act by interfering with oxygen usage in the body, and wrote perceptively about the difference between anaesthesia and asphyxia. Only a few examples of the riches in these papers can be mentioned; but while these will be understood by any anaesthetist today, for a fuller appreciation of Snow's achievement some understanding is necessary of the physics, chemistry, and physiology of his times.

The book is beautifully produced, and easily readable, the original page size having been enlarged, and Dr Ellis has provided a valuable index. Once again the specialty is greatly indebted to him for making an early classic readily accessible, one that is an essential supplement to Snow's posthumously published masterpiece, *On chloroform and other anaesthetics*.

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LISA ROSNER, *Medical education in the age of improvement: Edinburgh students and apprentices 1760–1826*, Edinburgh University Press, 1991, pp. 273, £30.00 (0–7486–0245–3)

This is the sort of book that should have been written thirty years ago. Lack of computers and, more significantly, of a statistically informed, rigorous social history precluded the possibility at that time. Had this book been available then, its analyses would have been an invaluable aid to many of the studies of Scottish Enlightenment science and medicine which have appeared over the last two decades. Rosner's book is a quantitative examination of students taking medical courses in Edinburgh from 1760, when matriculation records first appeared, to 1826, when the Royal Commission on Scottish Universities descended on Edinburgh. The story is not just a presentation of statistics. These form the backbone of a well told tale of the institutional and social life of medical students in Edinburgh. None of the evidence demands a thorough reinterpretation of the history of Edinburgh medicine as currently perceived, but it all adds substantial weight to what were formerly conjectures. Rosner shows, for example, not only that students attended Edinburgh in order to become either gentleman physicians or manual practitioners, but that these distinctions flourished among the students themselves. She shows too, as historians in other areas have increasingly been recognizing, how immensely important were the demands of colonialism and war in the eighteenth century; in this case in shaping medical education. Recent work which has stressed the importance of the rise of surgery in the late eighteenth century also receives support from her account. Rosner plots the remarkable success of the Edinburgh surgeons in promoting medical education in the city. She shows that, by 1800, they virtually controlled a second school of medicine. The intellectual history of Edinburgh medicine is not addressed. Clearly this is integral to the story, yet such attention would have required doubling the length of the volume. This is good history, well written, and a significant contribution to Scottish Enlightenment and medical historical studies.

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