Book Reviews

MICHAEL J. AMINOFF, Brown-Séquard: a visionary of science, New York, Raven Press, 1993, pp. xii, 211, illus., \$85.00 (0-88167-956-9).

If there is a direct relation between the fame or notoriety of an individual and the number of biographies of him, then the case of Charles Édouard Brown-Séquard (1817-1894) is a paradox. He was one of the most outstanding medical scientists of the second half of the nineteenth century, a founder of neurology and of endocrinology, and a founder physician of the neurological National Hospital in Queen Square, London. His name is known universally in medicine, for it is applied eponymously to the syndrome of neurological sequelae of hemisection of the spinal cord. He published some 577 books and articles on a variety of topics and his achievements were acknowledged by twelve awards and medals and election to thirty-seven learned societies, including those in France, America, and Britain judged the most prestigious. His private life was equally memorable. He was born in Mauritius of an American father and a French mother, but of British nationality, and graduated in medicine at Paris in 1846. Thereafter, Brown-Séquard travelled restlessly between Paris, London, the United States, and Mauritius until 1878, when he was elected to the chair of medicine at the Collège de France, following the great physiologist Claude Bernard (1813–1878). It is said that he crossed the Atlantic some sixty times, and he made residences in France six times, America four times, Mauritius twice, and in Britain once. He had three wives and three children. This record of professional and domestic accomplishments was achieved in a life characterized by "dramatic reversals of fortune in colorful and varied settings" (p. vii), and must surely be unique for a medical man. And yet during the hundred years since his death no detailed account of Brown-Séquard's extraordinary career has appeared. Thus the paradox.

Dr Aminoff, professor of neurology in America, but of British origins, has now rectified this curious neglect. The first half of his book deals with the man, his life and work in general, the second with his major contributions to physiology and clinical medicine. Brown-Séquard was utterly devoted to the experimental method, and his enthusiasm for it resulted in financial and professional difficulties, opposition from the anti-vivisectionists, and deleterious consequences for himself from self-experimentation, in addition to scientific advancement. However, much of his research was based on intuition, impulse, and a fertile imagination, rather than on the more usual detailed, cautious and critical analysis. He possessed singular insight, but at times he fell into error, when his judgement went beyond his experimental evidence. Nevertheless, he made many significant discoveries and anticipated a number of developments, although it was inevitable that at times he also reached erroneous conclusions. In old age, therefore, he suffered considerable obloguy, which in part explains his biographical disregard. But in the neurosciences he was the first to define correctly the spinal cord sensory pathways, to describe spinal shock, and to identify the vaso-motor nerves. In endocrinology he revealed that the adrenal glands are vital to life, and his use of animal extracts was the beginning of modern hormone replacement therapy. Moreover, his concept of chemical integrative mechanisms has been proved to be correct.

Dr Aminoff has produced an excellent biography in which he reveals his knowledge of the background history of neurology and medical history in general, and introduces modern interpretations where appropriate. His material is immaculately referenced and drawn from many primary as well as secondary sources. There is a full bibliography of Brown-Séquard's works, and the book is illustrated and gracefully written, the only possible objections being the plethora of exclamation marks and the brief index. Brown-Séquard was indeed a visionary of science, and it is pleasing that a full and accurate biography of a distinguished and eccentric medical scientist has at last been written. The paradox remains, but the void has been filled successfully by a book that deserves wide attention.

Edwin Clarke, Donington-on-Bain, Lincs.

JORDAN GOODMAN, Tobacco in history: the cultures of dependence, London and New York, Routledge, 1993, pp. xi, 280, £40.00 (0-415-04963).

"The culture of tobacco" might mean many things, from the social effects of cultivation to the context of consumption, from the skill with which snuffboxes were produced to the art, music, and literature in which tobacco consumption featured. Jordan Goodman's history of tobacco proceeds