speciality, or with neurologists. They cover a remarkable range of topics, a variety that is directly proportional to the diversity of their scholarly quality and the number of Whiggish comments they contain. Only a few of the papers warrant being mentioned by name, but there are others of considerable merit. Among the latter are the biographies, which deal with Elizabeth Garrett Anderson, Horsley, Carswell, Thudichum, Willis, Gordon Holmes, Brown-Séquard, Houston Merritt, Charcot, and Gilles de la Tourette. Francis Schiller in his usual scholarly style writes on electrotherapy, but his main message concerns terminology, of which he is a master. J. D. Spillane's account of paralysis and sensory ataxia is also worthy of comment, although he draws little from German sources. 'The seat of the soul' by G. W. Bruyn is a curious, superficially scholarly piece, with the ostentatious use of Greek and Latin in the text and marred by recurrent opacities and the use of material that has already appeared elsewhere. One of the few outstanding contributions is by Dr. K. Dewhurst on Willis and British neurology. Whereas most of the papers display "internalist" history, Dewhurst, and also Schiller, bring a broader spectrum to their writing. Also of special interest are the papers on neurology in Norway, India, and Japan, about which little has been written so far.

There is a brief appreciation of Dr. Critchley and a list of his publications, but regrettably no mention of his historical interests. And yet this is a prominent feature of a multi-faceted genius, and presumably the reason for the theme of the symposium and *Festschrift*. No one, for example, can forget Dr. Critchley's celebrated lecture on the history of Huntington's chorea, his account of European neurology, or his use of history in teaching. Dr. Critchley's many contributions to the history of neurology literature are worthy of comment, and it would have been useful if even the titles of his historical books and papers had been listed separately. But, like the entries themselves, the list is incomplete, because the important paper, 'Neurology's debt to F. J. Gall (1758–1828)' (*Br. med. J.*, 1965, **ii**: 775–781), has been omitted. And finally, a critical comment on the high price of a fascinating and valuable book is inevitable; no doubt the many illustrations have contributed to the cost, and some pruning of those that have appeared again and again in previous publications would have achieved some economy.

Nevertheless, we must congratulate the contributors for their devotion and the editors for their industry, but, more importantly, Dr. Macdonald Critchley for having generated so much reverence, inspiration, and affection throughout the world.

Edwin Clarke
Wellcome Institute

RUSSELL N. DEJONG, *A history of American neurology*, New York, Raven Press, 1982, 8vo, pp. [vi], 157, illus., $23.80.

Too long have we awaited an account of the beginnings of the neurological sciences in the United States! When the American Neurological Association held its 100th annual meeting in 1975 under the Chairmanship of Dr. Joe Foley, a brief but fascinating centennial account was published by Denny-Brown, Augustus Rose, and A. L. Sahs. This commentary whetted one's appetite, and hence we cordially welcome Dr. Russell DeJong's elegant volume.

Medicine was not established as a profession in North America until the Revolution. By 1800, there were four medical schools in the United States. As in Great Britain, general physicians were responsible for the care of patients with maladies of the nervous system. Neurology emerged as a speciality during the War of the States (1861–1865), largely through the enterprise of Weir Mitchell and W. A. Hammond. Both were commanding and versatile personages, whose fame and influence extended far beyond the American continent. Their interest in injuries and diseases of the nervous system encouraged other general physicians on the East Coast, particularly in Philadelphia and New York, including C. K. Mills and W. G. Spiller, Joseph Fraenkel, Joseph Collins, and Pearce Bailey sr. The last three were instrumental not only in founding the Neurological Association but also the New York Neurological Institute, the latter not materializing until 1909 in premises in East 67th Street. Further west we recall the pioneering work of Robert Bartholow in Cincinnati, the first person to stimulate the human brain, and then Frank W. Langdon, also of that city. The neurological tradition of

Chicago began with James S. Jewell, the first President of the American Medical Association. Between the two world wars, medical neurology became somewhat beclouded by the sheer multitude of psychiatrists, psychotherapists, and psychoanalysts. Neurosurgery, too, had established itself in a position of great authority through the work of Charles Frazier and Charles Elsberg, followed closely by Dandy and by Harvey Cushing. Immediately after World War II ended, medical neurology underwent a renaissance. This was largely due to the personal efforts of Abe Baker and Pearce Bailey jr. About the same time, there was an upgrading of the Veterans' Hospital Service with special neurological divisions; the establishment of the Federal-supported National Institute of Neurological Diseases and Blindness as an organization for intra- and extramural research; the formation of the Academy of Neurology, and its special journal *Neurology*, edited by Russell DeJong; and the institution of "Boards" which sifted the men from the boys, and hence endowed great professional prestige to those neurologists who proved their worth. The magnificent outcome of all these auspicious circumstances is seen today in the position occupied by America in the international neuroscientific scene.

DeJong's book tells all this and much more. To those outsiders who have grown up as onlookers, the book is vastly appealing. If a reviewer were permitted to quibble, it would only be to wish that it had been longer, and that the constituent biographies went deeper so as to reveal in each case the human being within his professional carapace, struggling to express himself. May the second edition appear quite soon, and may it be bulkier.

Macdonald Critchley
National Hospital for Nervous Diseases
London

CHARLES WEBSTER (editor), *Biology, medicine and society 1840–1940*, Cambridge University Press, 1981, 8vo, pp. ix, 344, £22.50.

This collection of nine papers originated in a 1978 conference on 'The Roots of Sociobiology' jointly sponsored by the Past and Present Society and the British Society for the History of Science. To the four papers presented at that conference five others were later added. The fact that four of the papers have already been published elsewhere should not seriously diminish this book's appeal to historians of British medicine and biology, or, indeed, to social historians.

In a masterful little introduction, Charles Webster endeavours to display some basic themes and preoccupations which run through this heterogeneous collection. "Modern biology and medicine", he observes, "are inescapably involved with questions of policy and politics." If this counts nowadays as a historiographic truism, specifying the precise nature of that involvement is far from easy or banal. The volume's natural focus is a set of five essays which treat the cultural cluster constituted by British human biology, genetics, eugenics, psychology, and social policy. In a precisely argued paper, Donald MacKenzie asserts the existence of institutionalized connexions between biometry and eugenic commitments and develops a view of eugenics as the ideology of the professional middle class. MacKenzie responds to the preceding essay by G. R. Searle in which the interests of the professional middle classes and their consequent attitudes towards eugenics are said to be complex and fragmented. Daniel Kevles's comparative assessment of genetics and eugenics in the United States and Britain offers a detour around ideology and class-interests in the historiography of these episodes: the disputes between biometricians and Mendelians were intense in this country and relatively bland in America because of differences in scientific job opportunities in the two settings. Bernard Norton provides a fine study of the eugenic background to Cyril Burt's work, and Gillian Sutherland sets British mental testing in its complex social and political context.

Among the other papers there is John Durant's lucid summary of the conceptual development of ethology, which stresses the interpretative circle that linked man's self-understanding to his depiction of the meaning of animal behaviour and then back to man's account of himself as an animal. The most richly suggestive (and richly documented) contribution is also, unfortunately, the most loosely (and at times confusingly) argued: Paul Weindling's 'Theories of the cell state in Imperial Germany'. He relates (*how* is far from clear) attitudes to social