and the selection of special burying grounds, the duties of searchers and the segregation of the sick and of contacts in their own houses and the marking of the doors with red crosses, the setting aside of and sometimes the building of huts or special pest-houses, all these are well described. The attempts to provide nurses and watchers for the afflicted and gifts of alms in money and in kind, the appointment by the municipalities of physicians and apothecaries to treat the sick demonstrate the human side of the calamities which so often happened and which were so constantly threatening. The ritual of preventive measures culminating in the Plague Rules of the City of London in 1665 became an accepted part of life. The importance of these measures in bringing to the notice of the nation the need for some degree of control in sanitary matters is not so closely argued. For instance the influence of the plague on the operation of the Poor Laws led in the next century to the rise of the voluntary hospitals. The reason why plague disappeared so rapidly after 1665 was, according to Dr. Shrewsbury, the development of the all-sea trade between Europe and India, which abolished the caravan route for merchandise from the East across Asia Minor and with it the 'rodent pipe-line' for the transit of *P. pestis* from its Indian homeland to the ports of the Levant. The suggestion that the Great Fire of London was responsible is given a categorical denial. Defoe had attributed this theory to certain 'quacking' philosophers.

This work will remain for many years a sourcebook on the epidemics of plague in the British Isles. Dr. Shrewsbury has shown where our knowledge is deficient, and given a wealth of references for those who wish to carry out further inquiries. There is still much to learn.

R. M. S. MCCONAGHEY

Mind, Brain and Adaptation in the Nineteenth Century. Cerebral Localization and its Biological Context from Gall to Ferrier, by ROBERT M. YOUNG, Oxford, Clarendon Press, 1970, pp. xiv, 278, £3.25.

Young follows in his book the development of the relations of mind and brain, that is the history of cerebral localization between Gall and Ferrier, and of the attempts to specify the functions of the brain in the relations between organisms and their environment. He is, like all those who have recently taken up the study of Gall again, rightly surprised by the magnitude of Gall's role in this context. He then surveys on the one hand experimental neurophysiology from Flourens to Broca, Fritsch, Hitzig and Ferrier; on the other hand the road from A. Bain's association psychology through Spencer's evolutionary associationism to Jackson's expanding sensory-motor psychophysiology to the cortex.

This is undoubtedly a very important story, and the book an important and well-written contribution to its history. Unfortunately it is a torso. Apparently the author is not familiar with the German language (German authors are consulted only in translations), and probably for this reason he does not discuss e.g. Herbart (in spite of Herbart's enormous influence on Johannes Mueller, whom Young does analyse), Fries, Beneke, Lotze, Moleschott and other materialists, E. H. Weber, Helmholtz, Fechner, Romberg, Griesinger, Wundt, Ziehen, Flechsig, Wernicke, Edinger, Benedikt, Exner and Mach. He also disregards important secondary work like that of Max Neuberger, while he quotes a simple hack like J. Thorwald. But all this is understandable. The omission of Marshall Hall is not.

ERWIN H. ACKERKNECHT