Book reviews

Occupational Lung Diseases. Edited by W. C. K. Morgan and A. Seaton. (Pp. 391; £15.00.) W. B. Saunders: Philadelphia.

Lung disease constitutes a major proportion of the total content of occupational medicine. The two editors, who have made outstanding personal contributions to the subject, are also the main authors of this book, and other chapters are written by acknowledged international experts. The work is undoubtedly an outstanding review of the present state of scientific knowledge of pneumoconiosis and of related disorders.

The opinions expressed reflect a particularly American influence because so much of the research chosen for review was carried out personally by the authors. This personal influence is also evident in the vigour with which some views are expressed. One difficulty in writing about controversial topics, however, is ensuring that the reader is able to distinguish between the opinion which is being stated and the various other views. The text does not always achieve this. For example, it is claimed (page 159) that dust inhalation plays only a minor role in the aetiology of obstructive airways disease in coal miners. This may be true of the United States and the authors are entitled to consider it a general fact of life, but it is not admissible to omit research from other countries which does not support it. Other views (Rogan *et al.*, 1973, *British Journal of Industrial Medicine*, 30, 217-226.) also suggest that it may *not* be possible to measure a specific effect of simple coalworkers' pneumoconiosis and that we *do* have methods of estimating dust exposure during life other than by means of the chest radiograph. These methods consist of measurements of the airborne dust concentrations and have resulted in conclusions different from those reached in the discussion of pulmonary function. It is remarkable that these results have been omitted at this point from a major textbook. They are mentioned in a later chapter on industrial bronchitis and the

findings correctly stated that dust exposure may cause a reduction in $FEV_{1.0}$, this reduction being present whether or not the radiograph shows evidence of pneumoconiosis. Herein lies the difference in approach of American and British workers in the field of coalworkers' pneumoconiosis. The latter use simple methods of physiological study only ($FEV_{1.0}$) but with obsessional measurements of environmental exposure. Dr Morgan and his colleagues have used the most elegant and advanced diagnostic techniques (much envied by me) to study pulmonary function in selected miners but without environmental data. The two groups reached fundamentally different conclusions. The reader must be left to judge the issue on its merits.

If I have created the impression that the book is concerned only with coalworkers, then that is my fault. The broad field is amply covered and there are some splendid chapters on subjects such as immunology, in which basic aspects are presented in an easily assimilated form. It would have been better to have discussed asbestosis-related tumours and asbestosis together since the epidemiology and pathogenesis of the two diseases are so closely linked. Perhaps the change could be made in later editions, together with a little softening of the dogmatic statement that mesothelioma is not dose-related.

Altogether an outstanding book and one which should be on every occupational physician's bookshelf.

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Disorders of Auditory Function II. Proceedings of the Second Conference of the British Society of Audiology, University of Southampton, 16-18 July 1975. Edited by S. D. G. Stephens. (Pp. 311; illustrated; £9.60 (\$21.00).) Academic Press: London. 1976.

Like its predecessor in the series, published in 1973 and edited by W. Taylor, this volume comprises an edited version of papers presented to the British Society of Audiology. The papers are collated

into five main sections: Noise-induced Hearing Loss; Electrophysiological Audiology; Paediatric Audiology; Neurotology; and Hearing Aids. No doubt to reduce the cost, which is modest for such a wealth of information, the printing is a photographic reproduction from typescript so looks less attractive than its predecessor, but it is nevertheless very acceptable. Errors are few.

The Thomas Littler Memorial Lecture by Professor William Burns on Noise-induced Hearing Loss: A Stocktaking, was both apt and lucid. In his historical survey of work on the effects of noise on hearing covering forty years he refers to the important surveys by Burns, Robinson, Taylor, Atherley and Martin, and the derivation and validation of the equal energy concept is described. Reference is made to improvements in audiometric techniques and to future considerations for the safeguarding of hearing. 'The prime consideration' he states 'must be the willingness of designers, architects and operators of plant and equipment to guide their efforts, from the start of any project, towards a realisation of adequate restriction of noise output as an integral performance requirement'. The high quality of this paper is maintained throughout the volume.

A paper by Spoendlin and Brun refers to a new block surface technique for demonstrating the immediate and delayed structural damage in the Organ of Corti in guinea pigs from exposure to different types of noise. Hearing protection and communication in noise is reviewed by Martin *et al.* Impulse noise-induced hearing loss in drop-forgers in Poland and the UK is dealt with respectively in papers by Kuzniarz *et al.*, and Kershaw *et al.* It is concluded that impulse noise-induced hearing loss follows the equal energy rule. Papers by Bryan on Industrial Audiometry and Tempest on the medico-legal aspect conclude section 1.

The papers in sections 2, 3 and 4 are concerned with new research or the evaluation of present methods and there