BOOK REVIEWS

Dust is Dangerous. By C. N. Davies. (Pp. xvii + 116; illustrated. 21s. net.) London: Faber & Faber, 1954.

Here is an interesting book but not an easy one to fit into a category. According to the foreword and dust jacket the book should interest works managers and engineers and those concerned with occupational hygiene. On the other hand, much of it seems to be written rather as technical comment on scientific aspects of dust sampling and prevention. Many of the topics are not adequately introduced for the general reader: the works manager and the safety engineer will sometimes need to read between the lines if they are to understand the more complicated and occasionally diffuse sections of the text.

The first chapter of the book, on "Dust Hazards of the Industrial Worker", forms an introduction of great general interest and is worthy of a wide public. It deals variously with the effects of widespread atmospheric pollution and with the many known hazards of special industrial dusts. The action of the ciliated epithelium in scavenging the lungs of dust particles is related in some detail and forms a suitable introduction to such topics as pneumoconiosis.

The illustrations of the first chapter are not always as well chosen as the topics of the text. Plate I shows a view of Donora in the United States where, in 1948, a disastrous chemical fog killed 20 people; the scene is depicted in the fashion of those railway posters which succeed in giving romantic impressions of our more grimy industrial areas and is surely inappropriate. The illustrations of agricultural spraying machines add little that might not have been surmised from the legend alone. Plate III, of the "right and wrong way of filling a tank with toxic chemicals", is of poor quality. A more effective means could surely be devised to illustrate protective clothing.

Chapter II forms a substantial part of the book and is very much Dr. Davies' own subject. To the initiated it will be regarded as an authoritative commentary on the sampling technology; to others seeking only general enlightenment the sudden appearance of formulae and the rather deviously explained terms such as "isokinetic" will, perhaps, be a little frustrating. The chapter contains much of interest but in its concern to embrace so many methods and aspects of sampling it omits to give a clear recommendation to the reader as to which method might best be chosen in practice.

Chapter III deals at some length with preventive measures. This is a difficult field, for every problem needs a special solution of its own. The author gives an

excellent account of the characteristics and limitations of the accepted combative measures. The survey shows, however, how far we still lack means that will, at no great cost and complexity, remove the smaller particles from the very large volumes of air commonly used in industrial processes.

Chapters V and VI collect together interesting and often elusive information on radioactive dusts and on household and non-industrial dusts. A final chapter on dust explosions outlines the principal features of this somewhat imprecise subject and shows how best to guard against some of the hazards.

As to the construction of the book as a whole, the reader is likely to be well satisfied. The standard of reproduction of the illustrations is generally high. The tables and indexes are attractively arranged and a very full set of references is included. The clarity might, however, be improved by the better introduction of the numerous special instruments and by the removal of jargon such as "kerf" and "cyclone". Many errors or, at least, awkwardnesses of syntax should have been corrected. The explanatory script of the line diagrams is often tediously small. It should not have been necessary to leave on Figs. 8 and 9 the many spidery lines that call attention so obtrusively to the blocks' earlier existence in a different context. These faults are superficial and a future edition will, we hope, give an opportunity for correction.

R. A. SCOTT

Ätiologie und Prophylaxe des Lungenkrebses (Aetiology and Prophylaxis of Lung Cancer). By F. Lickint. (Pp. xv + 212; 29 illustrations. Price 21s. 6d.) Leipzig: Theodor Steinkopff, 1953.

A short survey of the distribution of lung cancer throughout the world and of its recent dramatic change in incidence leads Professor Lickint to the conclusion that the common squamous and undifferentiated cancers are preventable. The main part of the book is therefore devoted to an examination of the various factors—infective, chemical, and physical—which have been suggested as being of aetiological importance in these types of growth. Pride of place is given to tobacco but no possible industrial risk is overlooked. The author is not always as critical as he might be; for example, he quotes Nordmann and Sorge's finding that 20% of animals exposed to asbestos dust developed squamous cell carcinoma without mentioning that the total number of animals involved was 10 and that other workers have

disagreed with the histological interpretation. But a book of this type is not likely to be used so much for its conclusions as for its references. For the latter it is invaluable, not only because of the number cited but also because of their catholicity. It is a pleasure to read a book in which full attention is paid to data coming from all countries. It is refreshing also to find an author who lays so much stress on the doctor's responsibility to apply his conclusions in the field of prophylaxis.

RICHARD DOLL

A Practical Manual of Diseases of the Chest. By Maurice Davidson. (Pp. x + 647; 255 figures. 84s.) Oxford University Press (London: Geoffrey Cumberlege). 1954.

A reviewer, with specialist knowledge in a limited field, is in a somewhat difficult position when reviewing a chapter on his speciality in a large textbook. It is impossible for textbooks, however frequently revised, to be completely up to date at the time of publication, and the problem is simply, "How out of date is good enough?", and, for a well known and widely respected textbook, it seems reasonable to expect it to be not more than two or three years behind the times.

Unfortunately, by this standard, the chapter on "The Pneumoniconioses" must be severely criticized. The histogram (Fig. 1) of the number of references related to date of publication tells the story quantitatively, and when the quality of the four most recent references are examined, three are found to refer to experimental animal pathology with very doubtful human applications, while the other refers only to the social problem of pneumoconiosis.

Although many of the old references have great value, it is impossible to neglect nearly all the work of the last 10 years without seriously misleading the reader. The reader should be told something of the work of Gough and Heppleston in differentiating the pathology of coalworkers' pneumoconiosis from that of silicosis. Similarly, the modern British radiological classification, which has been accepted as the international classification, should surely at least be mentioned. The author refers to the differences of opinion amongst doctors in interpreting x-ray films showing pneumoconiosis but makes no reference to the work of Fletcher in measuring this

error and in reducing it by means of standard films. The medico-legal section too has an odd flavour. It must

FIG. 1

antedate the National Insurance (Industrial Injuries) Act of 1946. The general effect is rather like a textbook on tuberculosis omitting the section on antibiotics.

However, a relative of mine once, to my horror, threw an expensive guide book to Scotland into the fire because it gave insufficient attention to the war memorial in Galashiels, so I would like to stress the probability of the excellence of the rest of the book, while advising readers to steer clear of the chapter on the pneumoconioses.

A. L. COCHRANE

Association of Industrial Medical Officers

In 1956 the Association of Industrial Medical Officers will celebrate its 21st anniversary by holding a meeting in London from September 24 to 29. The hosts will be the London Group of the Association, and the Scientific sessions will be held at the London School of Hygiene, which was the venue of the first meeting in September, 1935.