premium, when increasing use is made of competing audio and visual media and programmed learning, these synoptic aids may have ever-increasing importance.

Two chapters are devoted to 'Communicable Diseases', one 'Bacterial', the other 'Viral and Others'. Although the diseases have been carefully selected, it is so easy to fall into the custom of repetition rather than to prune ruthlessly and with courage. Diphtheria, for example, has nearly five pages devoted to it. Does it warrant this attention, when less space is devoted to Health Education?

As in the first edition, the two chapters which interest me most are those on Medical Statistics and Epidemiology. The first deals very concisely with Vital Statistics, Medical Statistics and Demography, explaining each with an economy of words which is most commendable. Computers in Medicine are also explained in simple terms. In an otherwise excellent book, the section dealing with the epidemiology of non-infectious disease is, for me, the most disappointing. To quote:

'One of the more valuable developments in medicine in recent decades has been the application of epidemiological methods to the study of non-communicable disease. Unfortunately, this development has been hampered by a lamentable shortage of experienced epidemiologists, in part related to the inclusion of epidemiology in preventive medicine, a section of medical science which lacks finance and respectability. Epidemiological excursions, if we exclude publications of medical statistical department of General Register Office, or a few major undertakings such as investigation of link between smoking and cancer of lung, have, outside sphere of communicable disease, been of a somewhat limited nature.'

Two pages later, he adds as if in parenthesis,

'Outstanding uses of epidemiological method in study of non-communicable disease in recent years have been:

1. relation between smoking and lung cancer
2. relation of exposure to ionizing radiations to increased incidence of leukaemia in certain groups of persons
3. study of factors associated with increasing incidence of coronary heart disease.'

Most, if not all, of my colleagues in social and occupational medicine would take issue with this limited view of epidemiology. Having attended some four of five meetings of the International Epidemiological Association, one gets the firm impression that epidemiology of non-infectious disease has made greater strides than the author would admit, not the least of this advance having been by the many epidemiologists from these islands, and in a variety of fields other than those three to which he refers above.

One final plea for the next edition. Could the differences and similarities in the organization of the National Health Services be amplified, by means of footnotes, for those in Scotland and Northern Ireland. As an external examiner in the National University of Ireland, I am certain my colleagues there would also strongly support this plea.

These few criticisms and suggestions apart, this book will find an important place in the required reading for both postgraduate and undergraduate students of Public Health and Social Medicine.

A. MAIR

Physiologie du Travail (Ergonomie). Vol. 1. Travail Physique Énergétique. Vol. II. Ambiances Physiques Travail Psycho-sensoriel. Edited by J. Scherrer. (Pp. 387 and 337; illustrated; 64 francs each volume). Paris: Masson. 1967.

Do the basic medical sciences have a contribution to make to comfort, efficiency, and safety in the workplace? That the answer is 'yes', for extreme conditions of work, is the subject of a recent symposium (*The Effects of Abnormal Physical Conditions at Work*. C. N. Davies, P. R. Davis, and F. H. Tyrer. Livingstone, 1967). For industry as a whole, the position is less clear-cut, possibly because there is no obvious way in which the subject can be applied. Efficiency is by and large the province of engineers who are primarily concerned with physical plant; the dimensions and physical requirements of the operatives are usually subordinate. Safety is within the ambit of the Works Medical Officer, but has he the training to identify the contributory factors in the environment—for example, the levels of noise and illumination, the thermal environment, and the manner in which information is displayed? The interaction between these factors and the age, physical activity, and nutrition of the operative is the theme of this new text on ergonomics. The two volumes provide invaluable background information for physicians and others who intend working in industry, and they make a useful sequel to Dr. O. G. Edholm's recent small introduction to the subject (*The Biology of Work*. World University Library, 1967); for this purpose they should be acquired by libraries of industrial medicine, where they are likely to be referred to over many years. There is still a need for shorter texts, including more practical details. The present authors are also competent in this respect, as may be gauged from the cheap but comfortable front seats of the Renault 4 motor car; they have more to teach us than they have so far revealed!

J. E. COTES

Equivalence of Medical Qualifications and the Practice of Medicine. A Survey of Existing Legislation. (Pp. 47; 5s.) Geneva: W.H.O. 1967.

This valuable booklet arises from a discussion on the equivalence of medical qualifications at the 39th session of the Executive Board of W.H.O. It is compiled on the basis of the replies given by 40 Member States to a questionnaire.

It provides a very clear and concise summary of the complex legal considerations which govern the admission of foreigners to medical practice in each of those countries. It is evident that several principles underlie the formulation of those laws. The most laudable of these is the desire to ensure that foreign-trained medical

men have a knowledge and competence comparable with those of men educated in the homeland.

A second principle is that of equivalence: that is, the right to practise should be on the basis of reciprocal rights granted by the applicant's own country. In the case of France it even states that such equivalence must be on a basis of a one-for-one reciprocity.

Most countries require foreign physicians either to qualify for, or to be in process of qualifying for naturalized citizenship.

The fourth principle, although not defined in so many words, is simply the protection of practice by limitation of entry. This is seen well in the case of Canada and the United States, neither of which have full internal reciprocity. There are in both countries certain States in which it is particularly difficult for the incoming doctor to obtain a licence to practise. By a curious coincidence those States to which it is hardest to secure entrance are those most favourably situated geographically, climatically, and economically.

Of these various principles, one suspects that protection is that which usually exercises the greatest influence. It is common knowledge that those countries which for any particular reason are short of doctors tend to relax their medical immigration laws, although it must be admitted that such relaxation has not so far occurred in the United Kingdom.

It is easy to be critical but hard to envisage radical improvements. It would be comparatively easy to expand widely the reliable ascertainment of standards of medical education, but a widespread relaxation of the barriers of nationality, reciprocity, and protection would result in a concentration of doctors in the highest market in the nicest places with resulting grave detriment to the deserving and needy lands.

The whole problem is at the core of international politics and cannot be regarded as a matter for the medical profession alone. Nevertheless it should try to take a lead because, of all the ways of life that men follow, the practice of medicine probably provides the strongest link that binds men of all nationalities and races. If and when the European Common Market gets on its feet medical reciprocity will have to be free. This may constitute the first crack in the ice which may lead to the breakdown of the many existing well-nigh impenetrable barriers.

W. MELVILLE ARNOTT

A Review of the National Coal Board. Medical Service and Medical Research, Annual Report 1966-1967. (Pp. 56; illustrated; price not stated.) London: National Coal Board, Hobart House, Grosvenor Place, S.W.1. 1967.

This 56-page booklet catalogues the work load of the National Coal Board's Medical Service. Interesting information is given on pneumoconiosis field research, on the relationship between chronic bronchitis and dust retention, and the disposal of dust particles in the lung.

The Medical Service's Yorkshire Division's work on occupational deafness with special reference to the testing of audiometer reliability will be of help to those

interested in measuring the hearing of those persons subject to noise. Their observation that some difficulty had been found in obtaining efficient ear muffs which could easily be worn in conjunction with a pit safety helmet is important. A special difficulty is the removal of the ear muff (for instance, to converse when a noisy machine has been stopped) without displacing the pit helmet.

Those recruiting ex-coalminers will be interested to know that the Medical Service has an immunization programme against tetanus in being for miners. Where the local health authority wishes to increase the general level of immunization in the population, a similar scheme exists for poliomyelitis. Furthermore, National Coal Board nurses can administer oral poliomyelitis vaccine to young new entrants at training centres.

A valuable section of the booklet is devoted in the Supplement to stretcher carrying. This work was carried out by the Board's Physiology Branch and is of special interest to those advising persons on lifting and carrying who suffer from heart defects or blood vessel disease. Those training first-aiders will certainly benefit from the knowledge that application of the following three simple rules will minimize muscle fatigue and the increase of blood pressure caused by muscular action:

(1) Carry the load with the strongest possible group of muscles;

(2) Divide the load between as many groups of muscles as possible;

(3) If one limb can carry a weight without fatigue, a similar weight carried simultaneously by the opposite limb will not induce fatigue and may help to avoid it by balancing the body, thereby avoiding undue strain on some groups of skeletal supporting muscles.

This is a very useful booklet and in it there is something of interest to any occupational health doctor. It will be of value to those studying for the Diploma of Industrial Health.

R. H. P. FERNANDEZ

The Doctor, his Patient and the Illness. 2nd ed. By Michael Balint. (Pp. 395; 30s.) London: Pitman Medical Publ. Co. Ltd. 1968.

The title suggests and the book proclaims a personal involvement of the doctor in his patient's illness at a time when the general practitioner is increasingly enjoined to delegate many aspects of patient care.

The writer, a psycho-analyst, conducted his field work at the Tavistock Clinic among groups of general practitioners in order to study the psychological implications of general practice, to train general practitioners better for their job, and to discover methods of training, the hope being to unravel processes in the general practitioner patient relationship which cause both patient and doctor much unnecessary suffering, irritation, and fruitless effort.

Section 1 is devoted to 'Diagnosis' and to an attempt to help the doctor make a psychological as well as a physical assessment of his patient. Unfortunately the detailed histories make rather boring reading.

Section 2 discusses psychotherapy in general practice