spectorate to monitor factory environments and to check upon the activities of employers and Factory Inspectorate alike. This body, it is suggested, should report direct to the Health and Safety Commission to ensure that appropriate regulations and directives are issued to protect the health and safety of all workers. There is also a call for greatly increased government expenditure on research into occupational safety and health, and the balance sheet of the Industrial Injuries Fund is given to show that there are many millions of pounds theoretically available to finance such research.

P. J. TAYLOR

Health at Work. By Ward Gardner and Peter Taylor. (Pp. 170; £5.95). Associated Business Programmes.

This is a book of practical advice written by two doctors with considerable experience of occupational health in the field, which has been cemented by service in an academic department. It starts by discussing why health is of concern to managers and work people and how interest in it began to grow. The next three chapters are on the organisation of health services at work, medical examinations and screening, and whether absence from work is due to sickness or not. Then follow chapters upon disability and disease, shiftwork and the general pattern of occupational hazards. The discussion now focuses rather more sharply upon chemical and physical hazards and safety. The working environment and mental health have a chapter each, and the last chapter deals with a collection of detailed but important matters which are always cropping up in any industry such as (to name a few) executive health, food handlers, backache, and alcohol.

Two appendices are attached, one of which lists some of the more important journals published in English in the field of occupational health, and the other gives a draft form for investigating and reporting incidents. There is a good index, the print is clear and is easier to read than is often found in these days.

This book is crisply written and the language keeps the reader on his toes, for example: 'Animal glue can safely be slapped about and left on the skin . . .' and ' . . . but we sometimes find that these same people are obese, smoke large numbers of cigarettes, and drive without their seat belts.' The approach of the authors is clear, logical, intellectually

honest, and thoughtful. It is informed by considerable practical experience but is also flexible enough to accommodate to what actually happens in industry.

A few mild suggestions may, perhaps, be offered for inclusion in the next edition. Photographs are, of course, expensive to reproduce, but a few more simple line diagrams might be included to illustrate how things work. Rather more emphasis is needed upon the importance of thorough training in safe working practices in the discussion on safety. The role of the genetics of personal psychology needs a mention, and so also does the relationship of personnel selection to the maintenance of group mental health. A little more about first-aid organisation and training for different situations would also not be amiss. Continuous processes in large automated non-traumatic plants combined with the increasing scarcity of professional medical personnel make the role of the first aider more important.

This is a very good book for both doctors and managers, and I would like to see it required reading on courses for both these groups.

R. C. BROWNE

Industrial Psychology, 6th edition. By E. J. McCormick and J. Tiffin. (Pp. 625; £8.50 hard covers, £6 paperback). Allen & Unwin: London. 1975.

The latest edition of this well-known American text comes nine years after the previous one and, in the authors' words, is intended to be a survey of the field of industrial psychology. To this end they have selected a representative sample of problems, methods, and findings over a wide spectrum to give an impression of the subject as a whole. The book does not claim to be inclusive in its content but it does claim to illustrate, with appropriate examples, the range of the more important topics and issues involved. In this it succeeds well and those who consult it to discover what industrial psychology is all about will find it a reliable guide, although readers in this country must expect to find British work under-represented.

The structure of the book is similar to that used in the fifth edition. It is in six parts, the first dealing with introductory chapters on individual and situational differences in behaviour and jobs and their requirements, while the remainder are devoted to the following major areas of industrial psychology: personnel selection and appraisal, the social and organisational

context of work, the job and work situation, human error and accidents, and psychological aspects of consumer behaviour. Within these sections some re-ordering of material is apparent. For example, the chapter previously entitled *Human Behaviour in Organisations* is now separated into two, 'Management Philosophies and Practices' and 'Employee-Management Relationships'. Although the change of emphasis reflects current thinking, in this and other sections of the book close reading is required to discern what new material has been included and what left out since the fifth edition. In two areas of particular interest to occupational medicine the main changes are: a much more circumspect approach to the concept of accident proneness and the introduction of McGlade's (1970) construct of adjustable behaviour in relation to safe performance; some up-dated references on shift-work and rest pauses in the discussion on hours of work. The appendices on elementary descriptive statistics, expectancy tables and representative personnel tests are retained and, like the rest of the book, clearly presented and well laid out.

Overall the book can be recommended as a work of reference. It gives a useful overview of most of the main topics in industrial psychology and those wishing to follow these in more detail will find it a convenient point of departure in pursuing their studies.

S. SHIMMIN

Medical Aspects of Fitness to Drive: A Guide for Medical Practitioners, 3rd edition. (Pp. 73; £1.25). Medical Commission on Accident Prevention. 1976.

This third edition is in response to recent changes in the law which make driving licences valid until their holders reach the age of 70. Drivers are now under a statutory obligation to inform the Licensing Authority if they get any disability likely to cause danger to the public. Once they become aware of this they are more likely to ask their family doctor's advice about the effects of illness on driving ability. The regulations for public service and heavy goods vehicle drivers are much more stringent than for private car drivers. A myocardial infarct bars bus or lorry driving for life, although one can drive a car after two months. So does a casual blood pressure reading of 200/110 or treatment with potent hypotensive drugs, although a private motorist may drive so long as hypotensive drugs do not make

him giddy. A coronary thrombosis or a complete heart block should be notified to the Licensing Centre because these are 'prospective' disabilities which may in time become 'relevant' ones. The distinction between the two is not always clear. Diabetes in itself is neither prospective nor relevant but if controlled by insulin becomes a prospective disability. Epilepsy is a relevant disability and is a bar to driving a private car for three years and public service or heavy goods vehicle driving for life. Multiple sclerosis, on the other hand is a prospective disability, and as such must be notified, but sufferers may drive during remissions.

There is an excellent chapter on the effect of drugs on driving ability. No fewer than 35% to 50% of motorists drive at least once a year after taking psychotropic drugs, often in association with alcohol. Most of them say they have not been warned of the dangers by their doctors. Neither MIMS nor the National Formulary give specific references of the effects of most drugs on driving. Driving may not be impaired by small doses of tranquillisers, but tricyclic antidepressants, monoamine oxidase inhibitors, anti-histamines, and analgesics such as Distalgesic do have an effect, and patients taking them should be warned by their doctors. Public service drivers should be given sick leave until it is seen that they have no reactions to these drugs. The effects of fatigue in long-distance driving is discussed in detail. A rest after three hours' driving abolishes fatigue with complete recovery and improved performance; after six hours' driving recovery is uncertain, and after nine some hours of sleep are needed for recovery.

There is as much information about disease, drugs, and driving as anyone is likely to need, but doctors nonplussed by complex problems are invited to discuss them with the Medical Advisory Branch of the Licensing Centre. Its telephone number is supplied in the penultimate paragraph of the book.

ANDREW SMITH

Medical Research: A Statistical and Epidemiological Approach. By John M. England. (Pp. 190; £2.25). Churchill Livingstone: London. 1975.

The title of this book is misleading without the subtitle and it would have been better to have recognised this. Statistical variability is an important characteristic of human beings and consequently of patients but it

is very far from being the major theme of medical research.

The body of the text is confined to 124 pages in which space the author attempts to cover most of the elementary statistical methods plus the techniques and results of epidemiology and clinical trials. A further 44 pages contain appendices of tables and technical notes on some of the statistical points and a reprint of the MRC leaflet on responsibility in investigations on human subjects.

As there are many figures and diagrams the author has left himself very little space to discuss a large and highly technical subject. I do not think he has been very successful and I feel he would have written a much better book if he had devoted more space to exposition and less to technical methods. As it stands, the book should be read in conjunction with a statistical textbook and not as a substitute for one, as the technical discussion of methods is sketchy and in places misleading. For example, the chapter on correlation and regression seems to me very confusing for a beginner as it begins with a discussion of classical Galtonian regression and goes on, almost tangentially, to the commoner and simpler case of regression of a dependent variable on one selected dependent variable or more. It also makes the bald statement that variables must be normally distributed for a correlation analysis to be possible, which is as it stands simply not true.

Other doubtful assertions that strike the eye may be quoted:

'The parameter which is measured is called a variate' p. 1. The distinction between a parameter and a variate is fundamental in statistics.

'There is no way to prove mathematically that the normal law describes experimental errors; it is simply an observed fact that it does so' p. 16. Perhaps 'sometimes' should be inserted between 'it' and 'does'.

'Variation of height and weight . . . can be predicted by the normal distribution' p. 17. Weight is not normally distributed and in any case, given that one of these distributions is normal, the other could not be.

It is stated that the hyperbolic confidence limits of a regression line are due to small numbers of observations at outlying values, p. 80. This is not so. It is due to the fact that random errors in estimating the regression coefficient have larger effects at greater distances from the mean.

The standard errors of some simple

mathematical expressions are given without indicating that they only apply to uncorrelated variables, p. 131. The formula for the error of a ratio is wrong.

This book is worth browsing through for examples of statistical method but the methods themselves should be learnt elsewhere.

C. C. SPICER

Occupational Health and Safety in Hospitals. Proceedings of a Seminar presented by Division of Occupational Health and Radiation Control, Health Commission of New South Wales on 26th November 1974. (Pp. 100; No price given).

The Division of Occupational Health and Radiation Control, Health Commission of New South Wales, organised a seminar on Occupational Health and Safety in Hospitals, held one knows not where, and this is a typescript account of the proceedings.

The 90 participants are listed at the end but it is not stated how they came to be gathered together. There were doctors, nurses, other medical workers, health and hospital administrators, and safety officers among them. Four were from private industry but the rest came from various government or similar departments. About 50% were administrators, medical or otherwise, but justifiably so when the objective seems to have been to sell the concept of occupational health and safety services to the hospital service.

The list of contents is inviting for although the formal papers have somewhat hackneyed titles, the reports of the eight group discussions promise something of substance, such as 'What are the physiological hazards to which hospital staff may be exposed?' Though 'physiological' turns out to be 'psychological' in the report itself, and there are a number of similar misprints, this is unimportant compared with the disappointingly naive presentations and group reports, especially emphasised in the latter by summarising them later in tabular form. On the other hand, it has to be remembered that an account of a seminar of this kind is not intended as a reference work and the participants were largely only being introduced to the subject.

Miss N. Bundle's contribution on Occupational Health Services for Hospital Staff acknowledges indebtedness to the Tunbridge Report in giving a good account of the ideal. Hospital Health Services, from Dr J. Toohey is a useful