onsidered. Some of the proposed solutions sound fanciful and desperate, such as covering mercury deposits in waterways with crushed automobile bodies, with plastic film rolled out and pinned on the bottom of water courses, or with a layer of condensed feathers, a tonne of which would complex one pound of mercury. There is a good chapter on the development of legislation against mercury pollution in the United States and the problems posed to the federal Environmental Protection Agency and to state agencies in its enforcement. The complex interaction between industrial, political and public interest is well illustrated. The biological aspects of mercury contamination are less well covered, however, and the medical reader may be irritated by some clinical inaccuracies and by such terms as 'negative symptoms'.

The problem of mercury in the environment illustrates the principle, and this is brought out in the book, that the industrial use of a toxic material cannot be considered in isolation but must involve the local community which it purports to serve, and even the population as a whole. The Health and Safety at Work etc. Act (1974) in this country makes some provision for this, and it remains to be seen how effectively our environment can be protected in the future.

This book would be of value to the reader who wishes to obtain a general idea of the social and political problems posed by mercury pollution. There are also 537 references. G. KAZANTZIS

The Back Book. By Maggie Lettvin. (Pp. 160; £4.50). Souvenir Press: London. 1978

There is no doubt that the protection of the back from strain plays a very important part in the management of low back pain and, if carried out meticulously, often results in considerable improvement in symptoms.

This American book is written with two objects, first, to analyse the type and location of the pain and its relationship to various activities. This is done in the form of a questionnaire and pain time chart which, when filled in, would be useful to the doctor seeing the patient, especially a rheumatologist, orthopaedic surgeon or industrial medical officer. The second object, following this analysis, is to show the sufferer from low back pain correct ways to move, sit, stand, lie and lift and also how to carry out every possible activity of daily living, even including sexual intercourse, in ways

that will avoid hurting the back. This is done in considerable detail, illustrated with plentiful diagrams. Some exercise regimes are included with the very appropriate warning that they should be done only if they do not cause pain. It also deals briefly with such things as analgesics, spinal fusion and gynaecological aspects.

I believe that for the intelligent patient this book will provide a lot of useful information. I would disagree with only a few minor points in the text, particularly the suggestion that low back pain is affected by wet, cold or draughts, a somewhat dated concept. Although rather an awkward size, it is neatly set out, easy to follow and not expensive to buy.

A. ZINOVIEFF

The Guide to Hygiene and Sanitation in Aviation. By J. Bailey. (Pp. 162; 28.00 Sw. fr.). WHO: Geneva. 1977.

Nearly 20 years have passed since the Guide to Hygiene and Sanitation in Aviation was first published, during which time little has remained unchanged or unchallenged within the aviation industry, other than those basic principles which have governed its various activities. It is these basic principles as applied to hygiene that the new edition of the guide has restated and clothed in a wealth of accurate and factual advice and, as a result, a very good book has been produced. Moreover, it is one which gives practical advice in sufficient detail to be useful without producing that degree of complication which will deter the faint-hearted, as can so easily happen.

The Guide is intended to be used in conjunction with the IATA Code of Practice which itself became available two years ago and together they constitute just that degree of guidance which is required. Both are complementary and while basic concepts are identical there are, between the two publications, some inevitable differences in emphasis. Probably the most important of these is the emphasis placed by the writers of the IATA Manual on the paramount importance of storage of food between production and consumption. This is also emphasised in the present Guide but the process of 'time stamping' which IATA recommended has not been taken up. This is not always an easy practice to enforce but it does have very great advantages which can safeguard this most crucial period as can no other procedure. Date stamping is now an accepted part of retail food distribution

and sale, and time stamping could most usefully be adopted in airline catering work.

However, both as a work of reference (in which it is helped by an adequate index) and as a manual of practice it is a measure of the Guide's worth that only small criticisms can be advanced. On the credit side some passages can be singled out as of outstanding worth and it would be difficult to express almost all that is best in food preparation techniques as succinctly as has been achieved in Section 4.6. Here and there the presence of correcting hands can be discerned but, on the whole, it is an eminently readable book. What a pity a 170-page paperback has to cost nearly £8! P. J. C. CHAPMAN

Isocyanates in Industry—Operating and Medical Codes of Practice. A Report of the Isocyanate Subcommittee, Health Advisory Commission. (Pp. 84; £4.50; BRMA members £3.00; EEC £5.00). British Rubber Manufacturers' Association Limited. 1977.

The British Rubber Manufacturers' Association has good reason to be proud of this publication which is a model of its kind. It is a revised and improved edition of a booklet which first appeared in 1971, and which was almost entirely concerned with toluene diisocyanate (TDI) alone.

Both medically and technologically the diisocyanates constitute one of the most interesting groups of chemicals in industrial use today. The very real medical problems associated with industrial exposure have been the subject of much comment, frequently ill-informed, in both the lay and the technical press. From time to time suggestions have been made that the isocyanates are too hazardous for industrial use. This Code of Practice gives an adequate description of the hazards and biological properties, both of TDI and other important isocyanates, and even more important, gives a detailed account of the measures needed for medical surveillance and to ensure safety in use. It describes proper storage requirements, the design of polyurethane production plant, proper fume extraction, the advisability of scrubbing systems, personal protective equipment, atmospheric monitoring, sound operating practices, and information for employees. The trade names of various isocyanate compounds are given, their chemical and physical properties, and their suppliers. Also listed are the names and addresses of suitable spirometers, respirators and other protective equipment, atmospheric monitoring de-

vices, and exhaust gas scrubbing systems.

Any industrial firm operating a process involving a hazardous isocyanate should have three copies of this booklet—one for their production manager, one for their safety officer, and one for their medical advisor.

A. MUNN

Proceedings of the Symposium on Absence from Work Attributed to Sickness. Edited by Ward Gardner, updated by Peter Taylor. (Pp. 162; £3.25).

This is a reissue, with some additional material, of the proceedings of a symposium organised by the Research Panel of the Society of Occupational Medicine and held at the London School of Hygiene and Tropical Medicine in June 1968. The additional material consists of a short account by Dr P. J. Taylor of recent work on 'sickness absence' with an appended list of the more important papers published in English since the symposium. The list makes no claim to be comprehensive. Even so, over 60 publications are included, evidence of the importance now attached to the subject; the bibliography in the original report went back to 1833 and contained only 240 references. The symposium has certainly played a part in this quickening of interest, although, curiously, there is nothing in the publication to indicate where anyone interested in the subject can obtain a copy of it. Presumably these are available through the Secretariat of the Society of Occupational Medicine (11 St Andrew's Place, Regents Park, London, NW1 4LE).

The symposium, although now ten years old, reads remarkably well. Most of the points underlined in it are still very relevant and should be of great interest to personnel managers and trades' unionists as well as to doctors and nurses working in the field of occupational health. Although absence rates in the UK are not, comparatively speaking, unduly high (rates in Holland and Sweden are much higher) nevertheless they continue to move upwards in spite of improvements in social and medical services and a presumed improvement in the health of our population. The reasons for this are uncertain. There is fairly consistent evidence that when additional sickness benefits for short-term absences are introduced, short-term absences increase, that an increased amount of sickness benefit paid weekly tends to be followed by an increase in the mean duration of spells of absence, that shift workers tend to have lower levels of absence than day workers, that there are

striking (and largely inexplicable) regional and occupational differences and that there are remarkable differences between doctors in the time they keep their patients in hospital, in bed and at home for apparently identical illnesses.

Anyone short of ideas for research should have no difficulty in finding plenty here to pursue.

C. R. LOWE

Notices

Health Hazards Affecting Pregnant Women in the Workplace

The nature of occupational health hazards and the ways to protect pregnant women and the unborn foetus from exposure to toxic chemical agents will be discussed at the subject session on this topic at the National Safety Congress and Exposition to be held in Chicago, 3 October 1978. The various biological mechanisms affected by exposure to industrial materials will be described. This session will be co-sponsored by the Occupational Health Nursing Committee of the Industrial Conference. For further information, please contact Julian B. Olishifski, Director, Industrial Hygiene, National Safety Council, 444 North Michigan Avenue, Chicago, Illinois 60611, USA. (Telephone 312-527 4800, ext. 233).

Science in the Service of Safety

A symposium on this topic, organised by the Association of Consulting Scientists, will be held in the Assembly Rooms, Bath, Avon, England, from 31 October to 2 November 1978. Lectures will be given on the topics of industrial safety, the use of contract research in safety evaluation, and aerosols, cosmetics and pharmaceuticals. The registration fee is £54 (including VAT) for members of the Association of Consulting Scientists and of the Union Internationale des Laboratoires Independants, and £65 for non-members. Copies of the full programme and registration forms are available from the Secretary, Association of Consulting Scientists, Owles Hall, Buntingford, Herts, England (Telephone 0763-72665).

Fifth International Conference on Pneumoconioses

The Fifth International Conference on Pneumoconioses, which is being convened by the International Labour Office and the National Pneumoconioses Committee of

Venezuela, will be held in Caracas, Venezuela, 29 October-3 November 1978. The agenda includes 1) evaluation of dust hazards in the working environment; 2) recent progress in the aetiology and pathogenesis of pneumoconioses; 3) biological and functional tests in early diagnosis and rehabilitation; 4) developments in control and suppression of dust in all aspects of mining and industry. Two Round Table sessions will deal with A) occupational hazards due to exposure to asbestos and their prevention; B) combined effects of exposure to dust and other occupational hazards in the working environment. Related meetings will also be held on the international classification of radiographs of pneumoconioses, and on the safe limits of exposure to mineral and vegetable dust. In addition, the National Organising Committee will hold short courses on basic training in diagnosis, treatment and prevention of pneumoconioses and other occupational respiratory diseases. Simultaneous interpretation into English, French and Spanish will be provided. Participants are invited to submit communications on the topics covered by the agenda. Three copies of abstracts of written communications (about 200 words) in one of the Conference languages should be sent by 30 August 1978, and three copies of the full text (up to 2000 words) not later than 30 September 1978, to the International Labour Office, Occupational Safety and Health Branch, CH 1211 Geneva 22, Switzerland. Other information may be obtained from Dr Manuel Adrianza, President of the National Pneumoconioses Committee of Venezuela, El Algodonal Antimano, Caracas, Venezuela.

University Education and Research in Safety

A symposium on this topic will be held at the Delft University of Technology on 11-12 October 1978. The symposium will deal with the demands for a system theory approach to safety problems in the systems in which we live, work and travel, and on the education and research necessary to achieve this. Further information is available from Symposium-bureau Academische Opleiding Veiligheid, Elektrotechniek, kamer 3-14 H, Mekelweg 4, Delft, Holland. (Telephone 015-781080).