heavy metals as environmental pollutants. This volume is based on the proceedings of one such supposedly international but largely North American conference on mercury held at Ann Arbor, Michigan in 1970. The work is divided into four parts: the occurrence of mercury in the environment and in man; methods of analysis; environmental dynamics of mercury; and the biological effects of mercury compounds.

The statement in the foreword that man has repeatedly underestimated the pervasiveness of environmental toxicants was well illustrated by the finding of raised mercury levels in fish and wild life based not only on Lake St. Clair, but also over large tracts of the Great Lakes and other major waterways in North America. However, while higher mercury levels were found in blood and hair in limited population surveys in those persons with a high fish consumption, these levels were on the whole lower than comparable figures reported from Scandinavia, and there were no recognizable symptoms of mercury poisoning.

The conversion of mercury in nature to the highly toxic methyl form is a most important phenomenon in mercury's rôle as an environmental pollutant. This methylating process is dependent on a number of environmental factors and, as pointed out in the discussion, present theories on the dynamics of this conversion have been based on relatively small samples and few observations. It is an undoubted fact that methyl mercury can be elaborated in bottom sediments and concentrated in food chains, but modifying factors and the significance of this reaction have not been fully evaluated.

The biological effects of mercury, and of organic mercury compounds in particular, are briefly reviewed. The dose response relationship and the possibility that untoward biological effects might occur, which are not at present recognized as due to the absorption of mercury, are also considered. In this respect a constructive epidemiological approach to the problem is outlined.

While this book gives valuable and interesting information, it seems to me a pity that the presentation is on the whole didactic and that the report of the discussions is so short. There must have been controversy on such a subject at the conference, and a book based on the conference surely provided an opportunity to underline the more contentious issues in the rôle of mercury as a pollutant of our environment.

G. KAZANTZIS

Digest of Pneumoconiosis Statistics 1971. Department of Trade and Industry. (Pp. 17; 41p) London: H.M.S.O. 1972.

These useful tables, which refer to the year 1971, are published in the same format as last year. Table II (Periodic X-ray Scheme of the National Coal Board) and the Introduction are reprinted, without any changes, from the report for the year 1968. This is unfortunate because the information given on the assessment of chronic bronchitis or emphysema occurring as a complication of pneumoconiosis is incorrect. An assessment for part of the effect of these conditions may be added to the assessment for pneumoconiosis, even if this is

under 50%, but the assessment for these conditions must not exceed that given for the pneumoconioses.

The digest is mainly concerned with new applications for boarding during the year and the resulting number of cases of pneumoconiosis diagnosed for the first time. These are considered by age, by percentage assessment, by industry, and in the case of coal mines by area. In addition, there are single tables of awards of death benefit and of the total number of living subjects by age and by percentage assessment who were receiving disablement benefits at the end of 1971. Many of these tables also give comparable figures for the four previous years.

Once again the majority of new cases of pneumoconiosis (623) are coal miners. This is a reduction of 150 from 1970; slate-quarry workers also showed a substantial drop (from 40 to 16) but there were no material changes in other types of industry. The total number was down from 1 108 to 900, about one third of the number diagnosed in 1963. Once again the number of applications for consideration (about 10 000) greatly exceeded both the number of diagnoses and the number of boardings. This was particularly marked in east and west Wales where there must now be over 5 000 coal miners somewhat disgruntled at being turned down in 1971. Again, one must ask if there is in this region an occupational disease of the lungs, perhaps due to 'powder reek' which is distinct from pneumoconiosis.

Pneumoconiosis is a mild disease affecting the retired miner. Over half of the subjects receiving benefit were more than 65 years old and nearly two-thirds of them had assessments of 20% or less. Over 80% of new cases in miners had this degree of disablement, but cases of asbestosis tended to be about 10 years younger and to be more seriously disabled. The attack rate of coal workers' pneumoconiosis was lowest in the south midlands and highest in the north-western region, closely followed by north Durham and east Wales. These regional differences cannot be ascribed to different standards in the various Pneumoconiosis Medical Boards because Northumberland, with the low rate of 0.4 cases per thousand wage-earners, sends its cases to the same Board as north Durham (4.4 per thousand).

The value of this publication would be greatly enhanced if similar figures could be given for the other industrial pulmonary conditions, byssinosis, farmer's lung, and mesothelioma, and I ask the Department of Trade and Industry to consider this suggestion for next year.

G. L. LEATHART

System of Ophthalmology. Vol. XIV. Injuries. By Sir Stewart Duke Elder, and Peter A. MacFaul. (Pp. 1356; 690 illustrations; 26 coloured plates; £17.50). London: Kimpton. 1972.

This latest volume in the *System of Ophthalmology*, edited by Sir Stewart Duke-Elder in his usual impeccable style, is in two parts, Mechanical Injuries and Non-Mechanical Injuries, and contains 200 more pages of text than the corresponding volume in the previous *Text Book of Ophthalmology* and slightly fewer illustrations (1 020). The two most important industrial hazards dealt with in the first part are intra-ocular foreign bodies and the indirect ocular effects of mechanical

injuries. Both of these large topics are well covered and have been brought up to date in an admirable way, especially in terms of modern diagnostic methods and treatment. The second part of this large work is probably more important to the specialist in industrial medicine in that it covers a wide range of potential ocular hazards, many of which are being increasingly encountered in modern manufacturing techniques. These include injuries due to thermal energy, ultrasonics, electrical energy, radiation of all types, and chemical injuries. There is also a small but useful section on ocular toxicology. All these sections have been brought up to date though much of the definitive text remains unchanged when compared with the previous edition.

This particular volume of the *System of Ophthalmology*, because of its wide scope and Sir Stewart's wise comments, will remain a classic in this field for many years to come and essential reading for those involved in medicolegal aspects of industrial medicine.

A. L. CROMBIE

NOTICES

Society of Toxicology

The annual scientific meeting of the Society of Toxicology will be held at the Washington Hilton Hotel in Washington, D.C., on 10-14 March 1974. Anyone interested may attend.

Programme, accommodation, and registration information for the meeting will be sent to all members of the Society and to those nonmembers presenting papers. All others should contact the Secretary for this information: Dr. Robert A. Scala, Secretary, Society of Toxicology, Esso Research and Engineering Co., Box 45, Linden, NJ 07036, USA.

Hygiene Standards for Airborne Amosite Asbestos Dust

The British Occupational Hygiene Society's Committee on Standards has just published their document which recommends standards for working situations containing airborne amosite dust. Originally, three types of asbestos were mainly used in Great Britain—chrysotile, crocidolite, and amosite. With the virtual elimination of the import of crocidolite because of the danger from mesothelioma, amosite is the remaining alternative to chrysotile asbestos in this country. Furthermore, there were many lagging situations where amosite has been used in the past which will require to be tackled by maintenance men in the future. This standard compares the risks in both animals and men of amosite dust to chrysotile dust and comes to conclusions with regard to the threshold limit value in terms of fibres per cubic centimetre of air and gives recommendations for the type of

protective equipment that should be worn at the various concentrations of amosite liable to be experienced in industry. It also sets out the methods of dust sampling, advising on periodical medical examinations, and touches on the risk of cancer.

Hygiene Standards for Airborne Amosite Asbestos Dust from the Committee on Hygiene Standards of the British Occupational Hygiene Society, 1973, can be obtained from the Journals Department, Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 0BW, at a price of £0.50 post free (cash with order only).

XVIII International Congress on Occupational Health

The XVIII International Congress on Occupational Health will be held in Brighton, England from 14 to 19 September 1975 at the Hotel Metropole.

The final scientific programme of the Congress is not yet complete but it is envisaged that it will cover the main topics set out below:

1. Sickness absence
2. Advances in toxicology and sciences of particular importance in occupational health
3. Occupational cancers
4. Placing of the handicapped
5. Links between occupational medical services and other community health services
6. Noise
7. Handling and transport of dangerous materials
8. Recent developments in ergonomics.

The provisional programme giving details of the Congress will be circulated in the summer of 1974.

American Academy of Occupational Medicine

The next annual meeting of the American Academy of Occupational Medicine will be held in San Francisco 13, 14 and 15 March 1974. Further information may be obtained from Dr. James M. MacMillan, Corporate Medical Director, Reynolds Metals Company, P.O. Box 27003, Richmond, Virginia 23261, USA.

Symposium 'Environment and Health'

The Commission of the European Communities, the United States Environmental Protection Agency, and the World Health Organization are organizing in Paris, from 24 to 28 June 1974, an International Symposium on Recent Advances in the Assessment of the Health Effects of Environmental Pollution.

Further information can be obtained from—The Secretariat of the Symposium 'Environment and Health', Health Protection Directorate, Commission of the European Communities, 29 rue Aldringen, Luxembourg (Grand Duchy).