time demonstrating how existing government and industrial records often leave us frustratingly short of what we really want to know.

A. T. WELFORD

Digest of Statistics Analysing Certificates of Incapacity 1955/56. (Pp. 177; multigraphed double-foolscap; 71 tables, 2 charts). London: Ministry of Pensions and National Insurance. 1958.

The digest of statistics produced for 1955/56 by the Ministry of Pensions and National Insurance follows the usual pattern. The statistical year runs from June to June; and although this means that direct comparisons with mortality and other data for the calendar year are impossible, there is the epidemiological advantage that the experience in one winter can be readily compared with the next. The weekly time trends of sickness claims over the winters since 1948/49 make the value of such comparisons quite evident. More precise comparisons between 1955/56 and earlier years have been tabulated by standardizing the various annual claim rates on the basis of the age and sex distribution of the insured population in 1951. The standardized claim rates are set out by cause, for each sex separately, for the various causes of disability in the International List. These rates suggest a rather alarming increase in the frequency of conditions such as anxiety states from 0.5 to 1.3 per 1,000 between 1951 and 1955. These rises are, however, generally confined to chronic disabling conditions and are likely to be the result of the extension of the sickness insurance scheme to the whole population including the chronic sick.

New tables describe the number of individuals receiving benefit during the year according to the occupation as given by the claimant on his first claim for sickness benefit. The distribution of length of the spells of sickness absence for each of the main causes is also given for each occupational group. Unfortunately, in 1955, four years after the census, no accurate estimate of the population exposed to risk was readily available so that no rates by occupation could be computed. Industrial accidents are given for each industry, and a supplementary table sets out the number of individuals sustaining one, two, three, etc. accidents during the course of the year. For both accidents and prescribed diseases the total number of claims by men and women are given in each of the major industries. The remaining tables are substantially the same as in previous years.

As the preface to this publication makes clear, the information is intended for the use of medical and social research workers and administrators. To the physician practising in industry, its immediate interest and value is thus likely to be limited. On the other hand, the tabulations represent much information whose potential is too often underrated. That potential is unlikely to be realized until the problem of computing the exposure to risk is firmly tackled. At present only an estimate of the age and sex distribution of the whole insured population is given so that interpretation of the claim counts given in such detail for various occupational and regional groupings cannot be readily undertaken. The difficulties of providing population estimates for such

groupings, occupational or regional, are patent, but the Ministry should feel confident enough about the value of the material at their disposal to make the substantial investment in time and effort which such population estimates will require. Certainly, without age and sex specific claim rates, the value to research workers in occupational medicine of these annual reports is likely to remain rather limited.

D. D. REID

Rehabilitation [Vol. 5 of the Supplements of *Zbl. Arbeitsmed.*] By Hermann Münk. (Pp. 152; 25 figures, 29 diagrams. DM 20.-.) Darmstadt: Steinkopff Verlag. 1959.

The writer has divided this volume into sections, each of which is discussed by a specialist. He gives a review of work done in the Anglo-Saxon countries and then describes activities of this kind in Germany. There is an interesting chapter on the legal aspect of injury or sickness associated with working conditions. It is pointed out that, by more attention to prophylaxis and the quicker change of or modification of work, many who become a charge on sick and other funds would not need to do so. This seems to be particularly true of those who suffer from circulatory disorders. Methods have been introduced in the town of Ohlstadt in which such patients are put through a course of training which may well be described as athletic. It is considered essential that the doctor controlling this preventive treatment should himself take part in the course. Results hitherto seem very good indeed.

The orthopaedic appliances illustrated and described seem to be similar to those known in Great Britain, but side by side with this much attention is given to the psychiatric problems of injury, and the cooperation between the surgeon and the psychiatrist seems to be closer than with us.

Although not strictly rehabilitation work, much space is devoted to the design of machines, whether for use by well or handicapped personnel. With this, time and motion study goes hand in hand.

One contributor laments the increasing proportion of industrial workers in Germany who have had no special training, possess no special skill and thus, paradoxically, may sometimes learn new methods more easily than those who have been taught old ones. Some attention is given to seating and lighting.

A protest is made, very rightly, about too summary a classification of an injured person without detailed consideration of the activities which are not impossible, those which are more difficult, and those which are unaffected. This protest is most emphatic when head injuries are described, for it is with these that such a great variety of effects can occur and likewise with these that the psychiatric and organic injuries are so intermingled.

This book is well presented and, for its size, packed with very good material.

G. C. PETHER

The Chemistry of Industrial Toxicology, 2nd ed. By Hervey B. Elkins. (Pp. xi + 452; 26 figures. 92s.) New York: John Wiley and Sons; London: Chapman and Hall. 1959.

The first edition of this book appeared in 1950 and was a valuable manual for works' managers and those involved in supervision of the handling of toxic materials in industry. In the preface to this edition it is pointed out that standards of permissible concentrations of toxic substances have found increasing acceptance and have become more severe. Also, many new analytical methods have been developed over the past decade, with particular emphasis on the analysis of body fluids. The author claims to have made an attempt to include the more important of these new developments, but seems to have been more successful in gathering toxicological data than analytical methods.

The layout of the book is good with a comprehensive chapter on air-sampling devices and discussion of their practical advantages and disadvantages. Chapters are devoted as before to the elements, inorganic compounds, different classes of organic compounds, and natural and industrial products. Toxicity data have been brought up to date and the bibliography increased accordingly. There is a new chapter on radioactive isotopes and increased information on the chlorinated hydrocarbon and organophosphorus insecticides.

The chief disappointment is in the almost unchanged section on analytical methods where little notice seems to have been taken of the new techniques referred to in the preface. Many of the methods are unspecific, as, for instance, those for chlorinated hydrocarbons by alkaline hydrolysis and titration; this is a pity, as the toxicity of a solvent may well depend on the amount of a related impurity present. Little advance has been made in the use of colorimetric methods which, besides being often quick and specific, are peculiarly suited to the analysis of multiple samples. Several of the colorimetric methods retained from the first edition still irritate by instructing the worker to "read through a No.—filter"; may we not have the wavelength of maximum adsorption given also? New alternative methods are given for cyanide and formaldehyde and there are methods for two or three compounds in urine not previously listed, besides methods for uranium, plutonium, radium, and strontium 90. There is only one example given for mixed toxic materials, that for benzene and toluene in air. Headings in Tables 41, 42, 43, and 46 are confusing, and Table 51 states no units of volume.

Both type and page size have been increased; this has not improved legibility but may have contributed to the doubling of the price from 44s. to 92s.

M. K. JOHNSON

De Industriële Loodintoxicatie in Nederland. By R. L. Zeilhuis. (Pp. 271; 46 figures, 45 tables, English summary of 5 pp.) Leiden: N. V. Drukkerij V/H Batteljee and Terpstra. 1959.

The author finds lead the commonest industrial poison in the Netherlands and discusses the complex nature of varying types of industrial exposure. He finds battery manufacture and the making of certain pigments to be associated with considerable risk while he remarks on the comparative freedom of painters and printers from lead trouble. Preventive action must not await symptoms

and the level of absorption should never be sufficient to produce these. The author finds punctate basophilia, the increase in the reticulocyte count and the rise in urinary coproporphyrins to be the most valuable indices of intoxication. The lead content of urine or blood provides less information about the reaction of the organism to the poison though it may give a precise measure of the level of absorption. Furthermore, the difficulty of the methods makes them unsuitable for routine screening of large industrial populations.

He concludes that of the various laboratory control methods punctate basophilia, as estimated by a dark ground technique, is a reliable method, while increased urinary coproporphyrin is an early sign of increased lead intake but is not such a reliable index of the extent of any subsequent increase. He regards a fall in haemoglobin as likely to be associated with increased "exposure intensity".

The author maintains that his investigations show that the MAC should certainly not be raised above 0.15 mg. per c.m. He wisely emphasizes the danger of distributing Ca EDTA as a prophylactic measure. Such practice he regards as quite unjustifiable; prophylaxis depends on good hygiene.

This is a sound, honest, and practical study of the lead industry of the Netherlands. It has been carried out with care and with common sense and even for those who, like the reviewer, have to rely on the English summary there is much to be learned about the supervision of the workman in the lead industries.

R. E. LANE

Exploration in Group Relations. By E. L. Trist and C. Sofer. (Pp. 64. 7s. 6d.) Leicester University Press. 1959.

This is a report of the first full-scale experiment in Britain with the "laboratory" method of training in group relations, the conference held in September, 1957, by the University of Leicester and the Tavistock Institute of Human Relations. Members of the Conference included a wide variety of those whose work brings them into close contact with such problems, as personnel managers, labour officers, probation officers, teachers, and wardens of educational establishments, and even prison governors. The methods used were based on those pioneered by the National Training Laboratory in Group Development at Bethel, Maine, and its allied institutions in the United States; that is to say, on small leaderless study groups of six to 12 members each with a consultant and an observer, similarly organized application groups, which (unlike the former) were given specific projects, and concurrent lectures and tutorials on social theory. All staff were professional psychologists or social scientists and those who conducted the study groups were psychoanalytically trained.

Although the British version of Bethel does not seem to have reached the emotional, "palsy-walsy", confessional heights of the sessions in the parent body; one does not hear, for example, that the group members' place cards were labelled in large letters with such abbreviated first names as "Joe", "Pru", "Herb", or "Bill", nor that