BOOK REVIEWS

Infection and Sepsis in Industrial Wounds of the Hand. Compiled by R. E. O. Williams and A. A. Miles (assisted by Barbara Clayton-Cooper and Brenda Moss). Medical Research Council Special Report Series No. 266. 1949. His Majesty's Stationery Office, Publications Division. 1s. 6d.

This valuable report is the culmination of a series of investigations carried out on at the Birmingham Accident Hospital and must of necessity be the basis of any future research on this subject. The authors have checked their many bacteriological findings by means of statistical methods and have thereby made factual a subject which might otherwise have become unwieldy.

Not least among the findings was the importance of Staphylococcus aureus in industrial sepsis and the fact that this organism was, in over 60% of cases, derived from the patient's own skin. On the other hand streptococcal infections seemed to be the result of cross-infection, possibly due to faulty dressing technique. Coliform organisms were found in every sample of oil emulsion and in 25% of oils examined and might be the source of contamination of industrial wounds with this group of organisms. From examinations of the wound dressings and its accessories, machine tools, oils, and oil emulsions, it did not seem likely that staphylococci in fresh wounds were often derived from these agents.

The authors adduce evidence for the existence of sepsis-prone persons but consider that further investigation is necessary to establish this. Many industrial medical officers could support the evidence for this from their records, but it would be difficult to prove because the amount of wounding suffered by workers, even by those on similar work, might be unequal.

The last part of the report deals with the prevention of wound infection, and medical officers in industry are already familiar with the previous work of the Birmingham Accident Hospital on aseptic dressing techniques. The present report in addition deals with local wound prophylactics such as sulphanilazole, cetavlon, and penicillin. It also considers the value of an occlusive dressing. It is concluded that thorough cleansing of the wound and skin diminished infection and that repeated applications of a sulphanilazole-proflavin compound decreased the incidence of infection and sepsis. On the other hand the authors warn of the dermatitis risk from some of these compounds. In my opinion this warning is especially salutary in so far as factory surgeons are concerned. The dermatitis resulting from sulpha-compounds can be prolonged and severe, and it is doubtful whether the risk of it is justifiable in the first-aid treatment of trivial wounds. Industrial dressings are so numerous that even remote possibilities occur all too often. It would be difficult to convince a factory population that an occasional mishap is justified by statistical evidence in favour of the offending agent as a prophylactic against sepsis.

This report is valuable in that its aims are wisely limited. Industrial dressings could be considered from many angles rather than sepsis prevention. A good first-aid dressing is of value in enabling an injured worker to work efficiently. For this reason industrial dressings should be able to stand wear and tear. This is especially important in encouraging the infrequent redressing technique, which the authors justifiably favour.

In testing out the occlusive dressing, the conclusions about the sudden appearances of the wounds and the times of healing will be of interest to all working in industry.

The authors point to the limitations of industrial first-aid and suggest that in combating sepsis safety engineering can help, particularly in the prevention of injuries from metal shavings.

G. W.


The presentation of the known facts of industrial toxicology in such a way as to be of practical value in the practice of industrial medicine, hygiene, and safety is a very big task, and this volume is a mine of information on industrial hazards mostly well presented. The various authors in the volume under review have drawn widely, mainly from the American literature, and to very good effect. But it would not be difficult to draw up an enormous list of compounds which do not appear in it at all. This omission is the result of the increasing rapidity of production of new compounds, and those active in industrial toxicology must ever be on the qui vive for the unfamiliar new product or for unfamiliar properties of old ones. On the whole the treatment is such as to make the matter valuable not only to medical officers but also to non-medical industrial people. There is no over-emphasis of any aspect: if anything there is an apparently conscious effort to avoid too great a stress on topographical pathology and histology. The result is that non-medical readers can extract much knowledge from the book without an over-weight of incomprehensible terms.

The problem of avoiding endless repetition of the signs and symptoms of members of homologous series is often overcome by a general discussion of the whole
Although full documentation is given for the data obtained by animal experiments, there is no criticism at all. It is well known that there is considerable difference in the reliability of experiments involving exposure to measured concentrations of gases and vapours because of the different ways of setting up concentrations and of measuring them by physical means. Similarly in chemical methods there are gross differences in accuracy. Further, "concentrations" are sometimes set up at levels which the nature of the substance studied does not admit or which are so far artificial (e.g., in temperature) that they have no relevance to significant conditions in industry.

This book would not be a human product if it had no errors, but we will perhaps be forgiven for drawing attention to certain gross inaccuracies. For example, Dr. Hamblin refers to the toxicity of diphenylamine thus: "Similar to that of aniline . . . " and to that of \( \beta \)-naphthylamine thus: "May cause mild methemoglobinemia . . . " These statements certainly need revision.

Nothing less than a high excellence could be expected from Dr. Robert Kehoe on lead poisoning, and the reader is not disappointed. But it would have been valuable to have his views on the alleged increased excretion of lead after citrate administration which has been shown to form non-ionogenic complexes with lead.

No mention is made in this book of the dangerous phosphorus insecticides, a marked lacuna in view of recent developments.

A chapter to which reference must be made is that by Dr. Patty, the editor, on "Potential Exposures in Industry". To whom the minute paragraphs on a large number of industries could be important, we simply cannot imagine. The pity is that this section of the book in particular is not illustrated (the whole volume is unillustrated), for in considering it, with many years of experience of industry, we envisage operations and men in activity, and only secondarily is the abstract of hazard and toxicity. Exigencies of space and expense probably made illustrations prohibitive in an already very expensive book (at least to us in Britain), but their absence has divested a most valuable section of its life.

We do not decry this valuable publication when we say that on the whole it is a skilful array of summaries composed from the literature to which have been added knowledgeable general discussions. It will find a ready public.


This is a most valuable book which has been prepared by departments of the Ontario State Government to aid physicians in the diagnosis of occupational diseases. The Industrial Health Division of the Department of National Health and Welfare propose to distribute this book without cost to all physicians in Canada who wish to receive a copy. In so doing they are likely to contribute a great deal towards a better understanding of occupational diseases.

The book is divided into five sections, the first one dealing with occupational diseases in general and giving the definitions of many terms which are used in their study. The second section gives a list of occupations, and indicates the potential dangers which may be encountered in each. These are given in the very simple manner of a list below the relevant occupation and is therefore useful for reference.

The third section gives a brief account of all the syndromes which may result from occupational risks and these are listed under the following headings: (1) "Abnormalities of Air Pressure"; (2) "Abnormalities of Temperature and Humidity"; (3) "Dampness"; (4) "Defective Illumination"; (5) "Excessive Noise"; (6) "Radiant Energy"; (7) "Electrical Burns"; (8) "Vibration"; (9) "Infections"; (10) "Dust and Fumes".

This is an admirable way of approaching the problems and again is very easy for reference. The accounts given of the various conditions are short, but full of detail and certainly most valuable. They are not intended for workers doing research on the subjects and they do not include references to the literature.

The last two parts of the book are concerned with occupational dermatoses and the Workmens Compensation Act in Canada.

This is certainly a most valuable book, and the Canadian Health Department are to be congratulated on producing it. In fact the Ministry of Labour and Ministry of Health in Great Britain might do well to follow the example.

K. M. A. P.


Industrial nursing touches on many fields, and an author who attempts to write a comprehensive book on the subject faces a very difficult task. This may well explain why no such book has yet been written. He must weigh the claims of very different specialties and present this widely drawn material to the reader as a comprehensive statement of present knowledge. Such at any rate would be the task of anyone attempting to write a textbook of industrial nursing. This book, however, makes no such pretentious claims; it is wisely called a handbook, and may therefore be looked upon as a guide rather than as an exhaustive treatise.

The book was first published eight years ago, but has now been so extensively revised and enlarged that it is hardly recognizable. It contains information that will be useful for the doctor and nurse long engaged in industry, but probably it is the newcomer who will most appreciate it. The facts she needs regarding factory legislation are presented in a small compass. She can find information on the staffing, equipment, and stocking of the industrial health department, and a very good account is given of the records and reports with which an industrial nurse should be familiar. The importance of careful collaboration with those outside industry interested in the health of her patients, the general