BOOK REVIEWS

Occupational Diseases and Industrial Medicine. By Rutherford T. Johnstone and Seward E. Miller. (Pp. vii + 482; illustrated. 84s.) Philadelphia and London: Saunders. 1960.

The authors, both physicians and university professors with considerable experience of industrial medicine, have written this book in response to a demand in the U.S.A. It has two parts; the first deals with the practice of industrial medicine and the second with occupational diseases.

Part I includes chapters on the duties of the industrial physician, hygienist, and nurse, various insurance programmes, man's reaction to stress, the rehabilitation of the injured, job placement of the handicapped and the diagnosis of occupational diseases, including the use of the clinical and toxicological laboratory. It will be of interest to the non-American reader because it gives a well written and vigorous account in just over 100 pages of American methods of practice and their development.

The accident and safety phase had its origin in the early years of this century with the passage of workmen's compensation laws. Industrial medicine was concerned almost wholly with traumatic surgery and compensation medicine. With the broadening of compensation laws there came the occupational disease and industrial hygiene phase which was well organized by about 1930. The present phase of health conservation started at the beginning of World War II, when the U.S.A. suffered a serious shortage of manpower. It became necessary to protect the health of the worker and employ the handicapped and older workers to the best of their capabilities. This is broadly the pattern of development in Great Britain, but in this country there has not been the same stimulus to prevention provided by compensation laws and insurance schemes, and so far there has been less emphasis on industrial hygiene which embodies the measurement of health hazards.

It is quite clear that the good American plant physician has fundamentally the same aims as the good British industrial medical officer. "First and foremost he must be a good clinician and know his plant." "His medical services must have the full backing of management and labour" and so on.

It seems likely, however, that more time is spent in small plants by the physician in the U.S.A. than in Great Britain. "On the average, one hour per day, twice a week, is required for a small establishment of 50 to 75 workers. Establishments of 500 to 600 employees require some physician twice daily." The type of medicine practised is summarized as follows:

First, assistance in placing men in jobs commensurate with their physical and mental abilities. Second, prevention of disease caused by the working environment. Third, practising constructive medicine aimed at im-

proving and maintaining health, particularly keeping emotional tensions from undermining health. And finally, medical treatment for occupational disabilities and treatment of non-occupational emergencies.

Part II, with some 350 pages, contains 13 chapters on occupational diseases and an appendix with the threshold limit values adopted by the American Conference of Governmental Industrial Hygienists. In addition to the classic and common occupational diseases such as the cancers and pneumoconiosis and those caused by noxious gases, hydrocarbons, the metals, ionizing radiations, and physical agents, there are chapters on synthetic resins, plastics, and propellants, and fuels and oxidizers. These are clear and well written chapters and will be valuable to any industrial physician. The sections on treatment are valuable because of the authors' wide experience as clinicians dealing with occupational diseases from discovery to recovery. It is only necessary to disagree with them on points of detail. Most British workers would not agree with the conviction that asbestosis does not predispose to the development of lung cancer or that arsenic is only a suspected cancer producing agent. It is odd, too, to find the statement that the pathology of mill fever is unknown, without reference to the classic studies of Caminita and his colleagues in the U.S.A. Reference might have been made to the International Labour Organization's classification of the Pneumoconioses (*Occup. Safety Hlth* (1959), 9, 63). This is a good attempt to achieve international uniformity, which, it is stated, has not yet been accomplished.

In the next edition it is hoped that the authors will relate the references at the end of each chapter to the text, and that there will be better pictures of chest radiographs and whole lung sections, even if it makes the book more costly.

This book with its balance of idealism and practicability contains one of the best accounts the reviewer has read of modern methods of industrial medical practice and a good description of the more important and newer occupational diseases. Without any doubt, it will be valuable to industrial physicians both inside and outside the U.S.A.

R. S. F. SCHILLING

Modern Occupational Medicine. 2nd ed. Edited by A. J. Fleming and C. A. D'Alonzo. Associate Editor: J. A. Zapp. (Pp. 587; 66 figures + 1 coloured plate. 90s.) London: Henry Kimpton. 1960.

This compact volume on occupational medicine is compiled by 22 authors, all of whom are employed by E.I. du Pont de Nemours and Company of America. It is divided into eight sections, each dealing with different aspects of the industrial physician's work. Lack of space has made it necessary to deal mainly with general

principles, and this somewhat reduces the value of the book to practising industrial medical officers. Brevity is particularly noticeable in the section on toxicology, which is "at best, but a brief outline of some of the more important chemicals encountered in industry". Apart from those subjects normally included in a work on industrial medicine there are a few which are unusual and deserve special mention. A chapter is devoted to the rehabilitation of the alcoholic employee. It does not seem that the condition is as common in England, but the information given will be of great interest to the doctor faced with this problem. The section on psychiatry is stimulating and controversial. The rather stern attitude recommended is a most enlightened and practical approach to the problem of the mentally disturbed patient in industry. The "occupational back" is recognized as a common disability confronting the industrial medical officer, and much useful advice is given in the chapter on this subject.

The book is attractively presented in a style which, although a little unfamiliar to the English reader, is clear and easily understood. The bibliography is extensive but regrettably few references are made to other than American literature. The authors do not set out to make this a work of reference, but it serves as a most useful introduction to modern occupational medicine for both undergraduate and postgraduate students. It can also be recommended to non-medical readers in industry, who wish to know more of the purpose and functions of an industrial medical department.

R. M. OLIVER

Health at Work: A Description of Medical Services in Fourteen British Factories. (Pp. 76.) London: Ministry of Labour and Central Office of Information. 1961.

This book has been prepared by the Ministry of Labour. In a foreword the Minister of Labour emphasizes the importance of promoting health at work from the national standpoint, and hopes that appropriate medical services will be more widely introduced into industrial undertakings.

By describing the health care in 14 different factories, varying much in size and in occupational hazards, this account should encourage employers to assess their own needs and opportunities. Some may need little more than good first aid arrangements and proper attention to plant and office hygiene, with part-time supervision by an experienced doctor or nurse; in others full-time staff with ancillary services such as dentistry, physiotherapy, and chiropody would be more suitable. Even the simplest forms of health care, if provided intelligently with the necessary attention to detail, would be a major advance in much of industry today. The descriptions given here include the views expressed on the services available by the workpeople, managers, doctors, and nurses; these are almost always favourable but perhaps insufficiently critical.

It is notoriously difficult to assess the cost of medical care in a factory and to compare one with another: nevertheless an attempt is made to do so here, the cost varying from 26s. to 100s. for each employee annually.

This little book, if read by employers considering for the first time the introduction of medical services to their factories, should be helpful, and is therefore to be welcomed.

T. G. FAULKNER HUDSON

Medical Forms and Procedures for Industry. By Herbert L. Herschensohn. (Pp. xv + 192. 68s.) Springfield, Illinois: Charles C. Thomas; Oxford: Blackwell Scientific Publications. 1961.

The author has practised industrial medicine in the United States for over 30 years and his book is based on this experience and on the exchange of ideas with others in the same field. It is not his intention to deal with medical treatment but rather with medical policy in (American) industry and the forms most suitable for implementing this policy. Nevertheless, his book will be of more value to the American industrial physician who, unlike his British counterpart, undertakes a considerable amount of treatment. He copes with his task alphabetically and almost literally from A to Z.

The physician who dislikes forms and paper work in general might regard this book as an arsenal of bureaucracy, but there will be few with any experience in industrial health work who will deny the value of a reasoned procedure simplified by the use of ancillary forms.

For the physician about to organize a new industrial health department, or to reorganize one in existence, this book will provide ideas and will help avoid pitfalls, although considerable adaptation will be necessary to suit local circumstances.

It is unfortunate that, in reproducing forms in this book, some print has been reduced to almost microscopic size.

J. L. FYFE

L'Automation: Aspects Psychologiques et Sociaux. By A. Chapanis, A. Lucas, E. H. Jacobson, N. H. Mackworth, L. Ancona, and G. Iacono. (Pp. 119; 10 figures. 110 PB.) Louvain: Publications Universitaires. 1960.

At the 15th International Congress of Psychology a symposium was organized under the direction of Dr. N. H. Mackworth with Professor Drever of the University of Edinburgh as President to discuss some psychological and sociological aspects of automation. This small book includes five papers (four in French and one in English) presented to the Symposium on that occasion. Professor Chapanis of the chair of psychology and industrial engineering at Johns Hopkins, Baltimore in a paper on the human factor in the construction of automation systems shows that automation is very far from being able to dispose of human co-operation and a major problem must be the manner in which the operator is incorporated in such systems. M. Lucas of the Renault Company at Billancourt deals with a concrete situation and suggests that the advent of automation has brought about new tasks which, however, do not differ radically from those which preceded them so that the transformation of the job has been progressive rather than revolutionary. Dr. Mackworth, formerly of the Medical