BOOK REVIEWS

Gassing Casualties : A System of Labels for Gassing Casualties Sent to Hospital. 1952. Association of British Chemical Manufacturers, 166, Piccadilly, London, W.1. Pp. 54. Price 3s.

Over a quarter of a century ago the Factory Department of the Home Office (now of the Ministry of Labour and National Service) issued a card outlining the diagnostic points of infections of workers due to the anthrax bacillus. These cards were designed as a means of attempting to ensure accuracy of diagnosis amongst workers in those industries where wool and hides could possibly cause infections either of the skin, of the gastro-intestinal tract, or of the lung. The essential object was that the management of the works should be aware of the dangers of anthrax and should be able to send a man to his own doctor or to hospital with a small card which was in effect a diagnostic *aide mémoire* to those who would be responsible for his treatment. Since that time similar devices have been designed for caisson workers and in the wider field of medicine for those who suffer from diabetes.

This brief account of the historical background focuses properly the efforts of the Works Safety Committee of the Association of British Chemical Manufacturers, which in 1950 appointed a panel composed mainly of industrial medical officers, to investigate the means by which a correct history and diagnosis of cases of gassing accidents occurring in chemical works could be sent with the patient from the works to the hospital. The result, a booklet, "Gassing Casualties," deals with 50 gases and contains 19 labels, which are essentially guidance notes for medical officers. The labels deal with various groups of gases with a similar pathological effect, or with single gases which are unique in their effect, and which require a specific antidote of a particular strength or of an unusual nature, e.g. hydrogen cyanide. Those gases with an acute effect, such as fluorine and hydrofluoric acid, or those with a dangerous latent period between exposure and the development of clinical manifestations, are grouped according to their special pathological action.

During its initial deliberations the Works Safety Committee had some little anxiety lest doctors should resent what amounts to a clinical history being presented not, as is usual, by a professional colleague, but perhaps by a lay member of the works. Though the label would when possible be signed by the industrial medical officer or the industrial nurse, in a great many instances it might perforce be filled in by, for example, the foreman or the works manager, who might be the one man who could give a correct account of the gassing accident. Fears of this nature were dispelled following discussion

with hospitals and medical organizations and by the acceptance of the scheme by the Association of Industrial Medical Officers.

It is well known that the term "gassed" applies to a multitude of various noxious substances, and that the term itself is insufficient for the initiation of correct treatment. The gassing casualty labels are so designed that they give, in addition to the employer's name, and the name and address of the patient, the name and description of the harmful substance to which the worker was exposed, together with details of the degree of exposure. Brief one-line notes are given on the nature of the gas and its pathological effects, and the remainder of the label is divided into a number of sections. These deal with (1) first-aid treatment already given at the works: this section informs the hospital about the action already taken and also acts as a reminder to the first-aiders in the works. (2) Immediate treatment recommended: this section sets out the treatment which may be applied in the works surgery if sufficiently skilled staff is available, or should be given immediately on arrival at the hospital. (3) Subsequent treatment recommended: this section sets out the treatment which may be required when the immediate distress has subsided, and may not need to be applied until some time after the casualty has been admitted to hospital or has reached home.

This attempt to ensure correct diagnosis and the appropriate emergency treatment without delay should be regarded as one of outstanding merit, and the Association of British Chemical Manufacturers and, indeed, the chemical industry, is to be congratulated on introducing a system which should be valuable to all doctors, either in general practice or hospital. It must be stressed that the labels are not intended as instructions to medical staff who are familiar with the action to be taken, but rather to give guidance to a casualty officer faced with the need for immediate action in an unfamiliar type of emergency and one which he could follow with safety pending the arrival of more experienced medical help.

A. J. AMOR

The Human Use of Human Beings. By Norbert Wiener. (Pp. 229 and index.) London: Eyre and Spottiswoode. 1950.

Dr. Wiener's earlier books on "Cybernetics, or Control and Communication in the Animal and the Machine" daunted the non-mathematical by the profusion and the complexity of the mathematical formulae which it contained, and irritated the mathematicians by its errors and omissions. In spite of this, the book has had a tremendous effect and has resulted in many

small groups of mixed disciplines meeting together in this country and in the U.S.A. to exchange ideas about this provocative new point of view in biology and human affairs. Dr. Wiener has now written a book for the layman in which he entirely avoids mathematical symbolism and attempts to emphasize the social consequences of the new insights.

The first chapter gives a brief outline of cybernetics in which the significance of feed-back is mentioned, but rather more space is devoted to the argument that information in communication systems can usefully be regarded as the negative of probability and of entropy. These ideas are further developed in a chapter on "Progress and Entropy" in which, however, he very soon plunges into a discussion of the ultimate fate of the universe and the illusory basis of ideas about the inevitability of progress. From that point onwards the arguments, although interesting and sometimes fascinating, often seem to have little relevance to cybernetics; there is, for instance, a good deal about the philologist's contribution to the understanding of language and semantics, and even more about the present social and political crisis in America. When Dr. Wiener speaks of the nature of the new industrial revolution in which we are unwittingly involved he speaks with authority, for he has taken a leading part in the development of systems of automatic control which include judgment and memory. He argues that just as the first industrial revolution has up to the present displaced man and beast as a source of power, so in a more completely automatic age, the more mediocre skills and judgments will become redundant. This new era is not remote but might arrive in the U.S.A., especially under the pressure of a war economy, in a matter of a very few years. He describes the possible results as a decade or more of ruin and despair in which the depression of the '30s would seem a pleasant joke.

Medicine is still facing the social consequences and the diseases of the older industrialization; it is depressing but nevertheless probably necessary to begin to think about the consequences of the next phase. As Dr. Wiener puts it, the "know-how" of the technologist, which is what government is becoming, is not enough; the "know-what", which involves a consideration of human values and human aims, is much more necessary in the long run, and this implies the fullest realization of the human capacities of the governed—the human use of human beings.

T. FERGUSON RODGER

Health Education: A Guide to Principles and Practice. By Cyril Bibby. (Pp. 222. 17s. 6d.) London: Wm. Heinemann. 1952.

This book is written to cover the whole range of health education. It is not a textbook of hygiene but something much more valuable—a series of essays endeavouring to give a liberal orientation to what may be described as the newest of the humanities. The chapters cover in a general way the philosophy, facts, and media through which health education is done,

and try to apply these particularly to home, school, college, and the community environment. Industrial aspects are only hinted at.

In such a general review of a vast subject it is inevitable that Mr. Bibby's study is extensive rather than intensive, but in a subject where so little research has been done it is safer to treat it somewhat superficially.

The author has a wide cultural background and a sympathetic and sensitive appreciation of human motivation. It is precisely these qualities which are so precious in workers in this field; as Mr. Bibby constantly implies, it is the attitudes which field workers communicate towards health and disease which are more important than a knowledge of the facts.

Since Mr. Bibby is concerned mainly with the training of teachers it is understandable that the accent should be mainly on schools and the whole of health education seen from the teacher's point of view. The impression that this orientation gives is by no means a reflection on the way in which health education is in point of fact done, but the health visitors, midwives, and medical officers, on whom so much depends, will find much refreshing and provocative material.

The appendices, which were obviously the subjects of considerable thought and effort, are useful summaries focusing points for the practical worker, though the draft syllabus for a qualification in health education is still only at the stage of a "letter to Nature".

The directory of health education organizations, though a prodigious achievement, is perhaps out of place in such a volume.

The book can be safely recommended to all those seriously interested in the subject, and will be of interest to any concerned in health or education, or those debating the question, "What shall I tell my child?"

J. BURTON

BOOKS RECEIVED

(Review in a later issue is not precluded by notice here of books recently received.)

L'Oxyde de Carbone et l'Oxycarbonisme. By V. Raymond and A. Vallaud. (Pp. 367; 22 tables and 50 figures. No price.) Published by the Institut National de Sécurité pour la Prévention des Accidents du Travail et les Maladies Professionnelles. 1950.

Evaluation of Industrial Disability. Prepared by the Committee for Standardization of Joint Measurements in Industrial Injury Cases of the California Medical Association and Industrial Accident Commission, State of California. (Pp. 89; 80 figures. £1 12s.) Oxford University Press (London: Geoffrey Cumberlege). 1950.

The Health Hazard of Shales Used for Stone Dusting. By G. Nagelschmidt and A. L. Godbert. (Pp. 15. No price.) London: Ministry of Fuel and Power (Safety in Mines Research Establishment). 1951.

The Nuffield Foundation Sixth Report (Year Ending 31st March, 1951). (Pp. 113. No price.) Oxford: The University Press. 1951.