The book, which is handsomely produced, should be bought, read, and digested by all those who are responsible for the management of hand injuries and disabilities.

E. A. DEVENISH

Expert Committee on Medical Rehabilitation. First Report. [*Wld Hlh Org. techn. Rep. Ser. No. 158.*] (Pp. 52. 3s. 6d.) London: H.M.S.O.; Geneva: W.H.O. 1958.

The first session of the Expert Committee on Medical Rehabilitation was held in Geneva in the early part of 1958. The members of this Committee were Dr. F. S. Cooksey (England), Dr. G. Harlem (Oslo), Dr. H. H. Kessler (U.S.A.), Dr. M. Maurer (Rumania), Dr. E. Mindus (Sweden), Dr. F. E. de Godoy Moreira (Brazil), Professor J. Parisot (France), and Dr. R. Soeharso (Indonesia), together with representatives from the United Nations, the International Labour Organization, and the World Health Organization Secretariat.

Owing to the large field to be covered and the complexity of the subject, the Committee confined itself to discussing general principles and practices. It was agreed that medical rehabilitation was the fourth place in the whole scheme of health measures applicable to an individual or community, the others being promotion of health and prevention and treatment of disease: later on in their report, however, the point is made that good treatment includes all that is understood by rehabilitation and this is more in accord with present day ideas. As severely disabled people more frequently survive nowadays, due to advances in medical science, rehabilitation problems tend to increase and the many services concerned in the rehabilitation process demand good team work if success is to be attained. Some striking examples are given of how rehabilitation services have reduced the amount of invalidism in some countries and eased the burden of State payments to the disabled. The general aims and principles of rehabilitation are wisely defined but perhaps more stress might have been placed on the need of the patient himself cultivating a right attitude of mind towards recovery.

Particularly valuable sections of the report deal with the coordination of rehabilitation services and the education and training of medical and other persons working in this field. The expansion of the social services in recent years has greatly increased the doctor's responsibility and potential usefulness, and it is essential that medical students should fully understand this, and often have fuller instruction in the principles and practice of rehabilitation; there is also need of better postgraduate education in these matters. The report goes on to outline the help that relatives, employers, and fellow workers should give to those with disabilities, but rightly stresses the doctor's duty to be well informed of rehabilitation techniques, to teach, and to lead the rehabilitation team.

In some appendices to their report the authors discuss the psychological aspects of rehabilitation, rehabilitation in some less developed countries and some special problems of the blind, deaf, and chronically ill, and end with some recommendations for further study and action. They consider that while the techniques for rehabilitating those with orthopaedic and special senses handicaps have been well developed, more attention should now be paid to

medical disabilities such as those due to circulatory, respiratory, and digestive disorders. They urge that thought should be given by the appropriate international organizations to the meaning of words such as "disability" and "impairment" and agreement sought regarding terminology. The extent of the rehabilitation problem should be studied by means of field surveys in individual countries, and where social security systems have been well developed these should be better coordinated with the machinery of rehabilitation. Good collaboration between government departments dealing with this subject on a national level is advocated, and the need is stressed of suitable training for all persons concerned in this work.

T. G. FAULKNER HUDSON

Ageing and Human Skill. By A. T. Welford. (Pp. viii + 300; illustrated. 25s.) Published for the Nuffield Foundation by Oxford University Press, London. 1958.

This book is an account of the research carried out by the Nuffield Unit for Research into Problems of Ageing from 1946 to 1956. It extends and deepens the pioneer work on human performance started by Bartlett and Craik during the last war. Perhaps a better title would have been "Ageing and Performance" because the research has covered a much wider field than that customarily denoted by the term "skill". Perception, problem solving, memory, adaptability, as well as motor skill, are some of the areas in which studies have been carried out.

The bulk of the work is experimental and the experiments are distinguished by the ingenuity with which they have been designed to examine fundamental problems but, at the same time, to preserve some analogy to tasks met outside the laboratory. The strategy of research may be taken as a model of what research should be. Rather general questions are asked first of all and then more precise information is gained by the use of additional controls. Although the investigations explore very different aspects of behaviour, they are unified through their interpretation by information theory concepts. The explanatory power and fruitfulness of this approach to psychological phenomena cannot be fully appreciated until the attempt is made to account for some of the more interesting findings in terms of stimulus-response learning theory.

The author's main conclusion is that changes in performance with age are due not so much to impairment in receptor and effector organs as to failure of central mechanisms to guide and control appropriate action. This failure is discussed in terms of "diminished channel capacity", "lowering of signal to noise ratio", and "lessened short-term storage of information". It is further suggested that the organic correlate of this failure may be found in the decrease in the number of active brain cells associated with increasing age. However, evidence is also adduced to show that older people compensate to some extent by an automatic adjustment of their activity to a level appropriate to their capacity.

The presentation strikes a reasonable balance between the detailed research paper and the semi-popular and inevitably over-simplified summary of results. And this should make the book suitable for industrial medical

officers and personnel managers who are seriously interested in the problems of performance and ageing. But it is not easy reading. In particular, the rather abstract chapter entitled, "On the Nature of Skill", although a masterpiece of condensation, may be unenlightening to those not conversant with contemporary psychology. (On the other hand it should be compulsory reading for third year psychology undergraduates.) In conclusion, it may be said that if someone wished to know what kind of sustained research had been done by experimental psychologists in this country since the war, no better examples could be found for them than the investigations reported here.

P. C. WASON

Een Onderzoek naar de asthmatische aard der Borstklachten van de Arbeiders in de Steenkolenmijnen (The Role of Asthmatic Predisposition in Coal Miners' Chest Complaints). By K. de Vries. (Pp. v + 124; 7 figures, 30 tables, 217 references. No price given.) Groningen: J. B. Wolters. 1958.

It has become increasingly obvious that in anthracosis (coalworkers' pneumoconiosis) there is no close relationship between the severity of respiratory symptoms and the radiological changes in the lungs. The ingenious study described in this thesis was undertaken in order to investigate the hypothesis that miners' chest complaints are influenced by an asthmatic predisposition. An earlier survey of school children living in a mining community enabled the author to sample children with asthma and asthma-free controls, matched for age, sex, and place of residence. The male mining relatives of these two groups, 260 in the asthma and 104 in the control group, were then compared using the information given on the health record cards available for each man. (It should be noted that the meaning of the term "asthma" used in this work is wider than that now current in this country and includes what we should call chronic bronchitis and emphysema.)

The ages of the two groups were similar; but the occupational histories differed, the proportion of miners working underground being lower in the asthma group, a finding the author attributes to self-selection. The number of days of disability due to dyspnoea, wheezing, chest pain, and cough was higher in the asthma group than in the controls and also in those working underground compared with those on the surface. Periodic radiographs of the chest of every miner have been taken since 1949. No significant difference in the prevalence of anthracosis was observed between asthma and control groups, but among the young miners in the asthma group a significantly higher proportion of non-anthraco-silicotic lesions of the lower lung field, costophrenic sinus, and diaphragm was observed.

The author concludes that his findings support the hypothesis. He considers that they also indicate that miners' chest complaints are influenced by the underground milieu but not by the degree of anthracosis.

A detailed English summary and English subtitles to the tables and diagrams enable those who do not read Dutch to understand the greater part of this interesting monograph, which includes a very complete review of the literature.

I. T. T. HIGGINS

Occupational Allergy. Lectures held during a course on occupational allergy organized under the auspices of the European Academy of Allergy; Foreword by D. A. Williams. (Pp. xvi + 329; illustrated. Fl. 30.-) Leiden, Holland: H. E. Stenfort Kroese N.V. 1958.

This book consists of 38 lectures given in May, 1958, under the auspices of the European Academy of Allergy. It is concerned with allergic reactions affecting the skin, eyes, and respiratory tract. The occupational aspects are broadly treated, since consideration is given both to those workers with pre-existing allergic manifestations and to the sensitization effects induced by working conditions; these are treated in some instances by industrial groups (bakers, pharmaceutical workers, printers, mine workers, cigar makers, cotton printers, and even the medical profession and its auxiliaries), in others by discussion of offending substances (kapok, wool, turpentine, formaldehyde, wood dust, coffee, and penicillin). Other lectures discuss the diagnosis of allergic diseases and delimitation of their occupational aspects, some consideration of the mechanism of sensitization, therapy, prevention, and compensation. A useful contribution from Dr. D. A. Williams evaluates statistically the "social consequences" of asthma, urticaria, other allergic disorders, eczema, and dermatitis; this work is based on the reports of our Ministry of Pensions and National Insurance, and it is probably true to say that comparable information hardly exists for other parts of the world.

The merits of this book grow out of its broad scope, its widely European authorship, and the speed of publication. Its weaknesses mainly stem from the same origins. The lectures are uneven in quality and include much that is already well known. They overlap considerably, and some contain large numbers of spelling mistakes and printers' errors. Some include details of the author's place of work and country of origin, others leave the reader to guess. Some give properly set out lists of references, others mention authors (with dates) in the text, but give no other help to those who would like to consult the original source. The chapters which stand out as specially good concern nasal affections as occupational diseases and occupational sensitization of the air passages by organic dust; there are also stimulating discussions of turpentine and of the dyes used in cotton printing.

J. R. SQUIRE

Noise and Your Ear: Modern Monographs in Industrial Medicine. 1. By Aram Glorig, Jr. (Pp. viii + 152; illustrated. 46s.) New York and London: Grune & Stratton. 1958.

Acoustics, Noise, and Buildings. By P. H. Parkin and W. R. Humphreys. (Pp. 331; illustrated. 70s.) London: Faber and Faber. 1958.

Here are two recent additions to the current flood tide of literature concerning noise. They arrive at a time when British industry and industrial physicians are taking a much closer interest in this particular aspect of the physical environment, and at a time when for many of us life is on the verge of becoming even noisier. Although each is written for a different public each, in its own way, is authoritative.