bution to industrial medicine. It is worth every penny of ten shillings.

R. MURRAY

Blindness : Modern Approaches to the Unseen Environment. Edited by Paul A. Zahl. 1950. Princeton University Press (London : Geoffrey Cumberlege). 22 plates. Pp. 576. Price 48s. net. (\$7.50).

This book, the combined work of 31 contributors, most of whom are experts in some particular field of blind welfare, is the most comprehensive publication on the problem of the blind which has yet been written in the English language. The word "problem" is used advisedly because, although all the contributors are obvious enthusiasts and have much to say on what has been achieved, one is struck perhaps most forcibly by the emphasis they place on how much there is still to be learned of the psychology of the blind before his problem can be truly solved, on how far from their goal even the most highly organized schemes still are, and how still imperfect are the many devices which have been invented to aid the blind. The other striking general impression which the book gives is how far removed from benevolent but sterile patronage is modern blind welfare ; with all its ramifications its single purpose is to make the blind self-respecting and self-supporting.

The book is divided into seven parts. The first is concerned with the history of modern work for the blind from its foundation by Valentin Haüy in Paris in 1785, when he started the first school for the blind, to the complexity of agencies, associations, societies, schools, schemes and legislative acts which operate today in the United States, Great Britain, Canada, and continental Europe. A distinct difference is remarked upon in policy on the two sides of the Atlantic. In America this is based on the principle of, as far as possible, educating, rehabilitating and training the blind at or from his own home, whereas in Great Britain and Europe the preference is for residential institutions.

The next two parts cover education, psychology, rehabilitation and training in general, separate sections dealing with the pre-school child, schooling, the adult, the aged and deaf blind. If these 11 chapters with their multiplicity of agencies, organizations, schemes and acts, with a leavening of psychological terms and somewhat burdened by repetition make rather heavy going for the amateur, they cannot fail to bring home to him the magnitude of the problem and are certain to be of great value to the expert.

After a section on the military blind, which includes a concise review of St. Dunstons by Sir Ian Fraser, the last half of the book deals in detail with aids to the blind. It is both easy to read and of absorbing interest. First are discussed the time-tested aids such as Braille and its rivals (there is an interesting account of its history and of the "battle of the types"), the talking book, the white cane, proficiency with which requires quite an elaborate technique, and the guide dog. Mention is made of aids to cooking, sewing, various games, and a number of manual trades and other activities. There are three chapters on aids which are in process of development, such as the recording machine, and on methods of research into the efficiency of existing

and experimental devices ; two further chapters describe reading machines and their future potentialities and the possibility of employing phosphene phenomena in the production of artificial sight. A final chapter summarizes the causes of blindness.

With the qualification that 90% of the publication is American in subject matter and in method of presentation, it is certain to be of interest and value to anyone connected in any way with the welfare of the blind.

A. LISTER

Eyes in Industry. By H. S. Kuhn, M.D. 1950. 2nd Edition. London : Henry Kimpton. Pp. 378. Price 60s.

Those of us who had to deal with eye problems in industry during the war years were always grateful for the help and guidance given in the first edition of this book. At that time there was practically no literature dealing with these problems.

This new edition has been enlarged, and like the majority of American publications is well printed and profusely illustrated with a series of excellent and instructive photographs. The advice given throughout, both on methods of prevention and on treatment, is sound, but one wonders to what extent the various eye programmes described are found in industry in the United States.

While no one could possibly cavil at the necessity for an adequate pre-employment ophthalmic examination, yet one does wonder what may be the ultimate result of some of the complete screening procedures of all industrial employees. In many industries a strict interpretation of desirable visual standards for those already in employment might well lead to almost insoluble problems in job placement. While periodical examination is undoubtedly essential in certain specific instances, such as crane drivers and locomotive drivers, for the great majority of workers, the examination is possibly better confined at the present time to improving their visual capacity, rather than in finding them unsuitable, judged by an arbitrary standard, for an occupation which they may have had for many years.

In many British industries there is undoubtedly room for improvement in the methods of conducting the initial eye examination, which is still too often done in an unsatisfactory and slipshod manner, but the question of suitable visual standards in industry is still one which has to be settled arbitrarily, and is influenced, not only by the type of industry, but by the availability of labour. Many of us have experienced difficulty in assessing the question of depth perception, and it is interesting to find that even in the United States they have not yet developed an entirely satisfactory method for investigating this faculty.

In Great Britain, where there is at present full employment, the difficulty is not so much one of selection from a number of suitable persons, as one of making the best of the material available, and indeed of thinking more in terms of minimum visual standards.

The chapters dealing with treatment are undoubtedly rather too detailed for the average industrial medical officer, and perhaps more emphasis might be laid upon