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BOOK REVIEWS

The Causes of Blindness in the Netherlands. (In Dutch with English Summary.) By J. Schappert-Kimmijser. 1959. Pp. viii + 148, 3 master tables. Vangorcum, Assen, Netherlands. (Hfl. 9.90).

The growth of statutory obligations towards the blind throughout the civilized world has led increasingly to the need of statistical analysis of the blind returns in the different countries, and to comparative studies as between different parts of the world. Blind statistics compiled by different workers according to personal codes of classification have long since given way to fairly uniform groupings. These have consisted of classifications mainly on an anatomical or an aetiological basis. The classifications in use in this country until recent years have been largely by clinical entity, and it was a real advance when agreement was reached between this country and the United States for a cross classification scheme showing both anatomical and aetiological diagnosis. This classification is now used in Canada, and is likely to be adopted in other Commonwealth countries; it appears to have been introduced, partially at any rate, in Japan, and it is gratifying that this scheme has now been adopted for analysis of the causes of blindness in Holland.

Dr. Schappert-Kimmijser has made a detailed analysis of the causes of blindness in 4,382 blind persons in Holland. Her material is sub-divided for further study of 2,092 who have become blind since 1940, and of 668 born blind since 1938. The largest single cause of blindness in 4,180 cases blinded by the same cause in both eyes was tapeto-retinal dystrophy (including retinitis pigmentosa); this led with 688 cases (16·4 per cent.). Optic atrophy accounted for 12·4 per cent., and glaucoma for 9 per cent. In contrast to the high rate of about 25 per cent. for senile cataract in England and Wales, only 0·8 per cent. of cases in the Dutch statistics were caused by cataract; likewise, only 2·4 per cent. were caused by senile macular lesions, which in England and Wales were responsible for another 25 per cent. The marked discrepancies between the Dutch and the English figures are readily explained by the markedly different age distribution of the registered blind in the two countries. In Holland only 22 per cent. of the blind were over the age of 70, as against some 70 per cent. in England and Wales.

Studies like the present, whilst of inestimable value in planning services in the different countries, have serious limitations for comparative purposes. No direct comparison is possible until there is international agreement on the definition of blindness: it is clear that in Holland there is a more rigid adherence to the standard of 3/60 than in the United Kingdom. Comparison is also impossible until the different countries have fairly similar systems of registration; as it is unlikely that compulsory registration of the blind is likely to be introduced in any country, the number of blind registered in any particular country will continue for many years to come to reflect the efficiency of the social services rather than the actual incidence of blindness. Failure to recognize these factors underlies the suggestion made in this study that the high incidence of cataract in the blind statistics of England and Wales reflects a fear of cataract operation in the English population. Actually the inclusion of cataract cases in the blind statistics is a measure of a number of complex factors operative amongst the small minority of cataract patients, who for one reason or another do not seek operation or are not suitable for it. The increasing number of such patients who come to the attention of the registration authorities is little more than a measure of the increasing efficiency of the social services.

The present study breaks new ground in bringing out the high proportion of the retinal dystrophies in blind children in Holland. Of those born blind since 1938, no less than 21·1 per cent. are recorded under this heading. The high incidence of genetically determined retinal degeneration in Swedish blind schools has thus been confirmed by this study for Holland. It is likely that the incidence of these disorders is as high in the United Kingdom as it is elsewhere, and that in the past these cases have been classified

under such diffuse labels as congenital amaurosis, congenital chorio-retinitis, cortical blindness, and optic atrophy. This monograph is welcome if only for clarifying this particular problem. It brings out well how much can be gained from the exchange of such observations on an international level—and how much remains to be done.

Handbook of Physiology. Section 1: Neurophysiology. Vol. 1, 1959, Editor-in-Chief: John Field. Pp. 779, 444 figs. Baillière, Tindall and Cox, London. 1959. Price: 176*s*.

The first volume of a multi-volume *Handbook of Physiology*, a large and ambitious project undertaken by the American Physiological Society under the general editorship of John Field and H. W. Magoun, has appeared. It represents an effort by the physiologists of America to systematize this vast field of knowledge in a readily accessible form, and for this purpose they have availed themselves of the help of a large number of outstanding workers from many countries of the world as contributors, maintaining a balance by introducing each section with a chapter written by an elder statesman still active in the field whose role is to synthesise the various contributions and assess the general philosophy of the subject as it stands in the middle of the 20th century.

There is much in this first volume to interest ophthalmological readers, although its appeal is wider. The first chapter (Mary Brazier) is a fascinating account of the historical development of neurophysiology from the theorizing of Aristotle and Galen to the present day. There follow chapters on general neurophysiology, embracing the physiology of the neuron, the conduction of nerve-impulses, and the mechanism of synaptic transmission in the skeletal and autonomic systems, as well as the neurophysiology of the brain. A full account of the physiology of the sensory mechanisms in man and the lower animals constitutes the remainder of the volume, introduced by a contribution from Lord Adrian. The most important part of this is devoted to vision, a section introduced by H. K. Hartline. It comprises chapters on photo-sensitivity in vertebrates (the Milnes), the image-forming mechanism (G. A. Fry), photoreception (G. Wald), retinal neuroactivity (R. Granit), and the central mechanism of vision (S. H. Bartley) with its control over the receptors and transmission systems (R. B. Livingstone). No better team could have been chosen for such a purpose; and each individual author has written a notable contribution, at the same time comprehensive and readable. If the remainder of the Handbook continues the same standard of excellence, the American Physiological Society will indeed have made the scientific world its debtor.

NOTES

University of Toronto

Dr. Frank B. Walsh, Professor of Ophthalmology, Johns Hopkins University, Baltimore, Maryland, delivered the second University of Toronto Walter W. Wright Lecture in Ophthalmology at the Academy of Medicine on October 23, 1959.

He spoke on "Trauma to the Skull and Certain Ocular Findings".

A Refresher Course in Eye Surgery has been arranged by the department of Ophthalmology in the University of Toronto for April 4, 5, and 6, 1960. Applications to attend the course should be made not later than February 15, 1960, to the Director, Division of Postgraduate Medical Education, Faculty of Medicine, University of Toronto, Toronto 5, Canada.

University of Minnesota

A Continuation Course in Ophthalmology for Specialists will be held at the Center for Continuation Study of the University of Minnesota from January 11 to 13, 1960.