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Man on His Nature. By Sir Charles Sherrington, O.M. The Gifford Lectures, 1937-8. Pp. 413, with 13 illustrations. London: Cambridge University Press. 1940. Price 21s.

The Senatus were happy in their choice of Sir Charles Sherrington as the Gifford Lecturer at Edinburgh in 1937.

The object of Lord Gifford (1820-1887)—"an able judge, with strong common sense and little respect for technicalities"—was "to found a lectureship or popular chair for promoting, advancing, teaching, and diffusing the study of Natural Theology, in the widest sense of that term, in other words the knowledge of God," and "of the foundation of ethics." Sir Charles reminds us that Lord Gifford desired that the subject of the lectures should be "treated as a strictly natural science." "Natural Theology," he said, "I wish considered just as Astronomy or Chemistry."

It was natural that Sir Charles Sherrington should make biology and physiology the background of his study, Man on His Nature, but the picture is filled in, from a full mind, with relevant considerations of philosophy, metaphysics and ethics.

Early in this study we are introduced to a sixteenth-century physician, Jean Fernel, a man of great culture and progressive outlook, who appears again and again throughout the lectures, as a sort of Greek chorus, to comment upon the advances of science and their bearing on the matter in hand. We have Sir Charles's promise that of Fernel we shall soon hear more.

The lecturer develops his theme in twelve chapters, leading from nature and tradition and superstition, to the scientific study of fundamental biology, evolution, the structure and working of the central nervous system, and the concept of mind, and on to the conflict with nature. The argument is so close-knit that it is impossible in a short notice to attempt to indicate its course in any useful way. The text demands close reading, but it is so terse, so lucid and so logical that the slight effort required is amply repaid. The author's style is a model of scientific disquisition, every word in his short, crisp sentences is weighed, and so carefully placed as to have its full value. He has a peculiarly happy choice of simile, which not only serves to illustrate his point, but is on occasion even "diagrammatic"—witness (p. 298) "Coalesced to a single mass it would not be so large as this full stop (.)"

There are passages that evoke a feeling of wonder, even in the initiated medical reader, whose sense of wonderment is perhaps somewhat blunted by familiarity. The process of fertilisation of the
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ovum, for instance, or the arrangement of genes in the chromosome, and their rôle as a "quantum of heredity"; the development of the "one sole cell" from which "each of us attains his or her final form and size"; the account of vitamins, cast in the form of Hume's "Dialogue," in which Philo explains to Cleanthes what is known of this mysterious subject; and, most striking of all, the way in which the embryo "prepares in darkness for use in light" that wonderful "optical camera"—the eye—from a "little pin's-head bud of multiplying cells... not one ten-thousandth part the size of the eye-ball it sets out to produce," and "80 per cent. of which is water." These and many other purple patches couched in simple language free of technicalities, leave an impression that is unforgettable.

To the medical reader the chapters (VII-IX) dealing with the structure and mode of action of the brain, its function as organ of liaison, and its relation to mind, will make a special appeal; as well as the final chapter, "Conflict with Nature," which contains graphic accounts of the life-history of Redia, the cause of sheep-rot, and of the anopheles in relation to malaria.

Throughout his study, Sir Charles takes us only as far as ascertained facts of science will carry us, and is content to accept many mysteries as still unsolved. "We are forced to accept energy and mind as a working biological unity, although we cannot describe the law of that unity."

*The Fundamentals of Nutrition.* By E. E. Hawley, Ph.D., and E. E. Maurer-Mast, M.D. Pp. xvi+477. London: Baillière, Tindall & Cox. 1940. Price 27s. 6d.

A lifelong sufferer from "indigestion" conceived the idea that all people should know more about diet and left his wealth to be used for instruction and research in physiology and nutrition. Thus was founded the department of Vital Economics in the University of Rochester, from which the present work emanates.

The volume is a compilation of discussions and technical data arranged with the aim of simplifying diet work, and it is hoped that the material included in each field may prove to be an adequate working basis without the inclusion of cumbersome detail. It begins with a short account of metabolism and the fundamentals of nutrition, and the greater part of the book is devoted to diet therapy and the planning of diets. A large number of colleagues have contributed to this section and the result is a serious lack of balance. Some of the articles are full and adequate; others are very short and only indicate the general principles of therapy. In some cases further information is given in the large and omnibus appendix.

In the tables of food values the authors list the figures for 100 calorie portions of the foods, instead of the more usual 100 gram
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portions. They claim that this makes the planning and calculation of diets more easy, but it is doubtful whether this view will receive general acceptance.

The work is full of practical suggestions and should be of service to those who are interested in dietetics.

A Handbook of Malaria Control. By R. Svensson, D.S.O., M.C., M.B., B.Ch.

This useful little book is issued under the auspices of the Ross Institute, and the Shell group of Oil Companies has generously defrayed the cost of publication of the first impression of 6000 copies. Although primarily intended for laymen engaged in malarial control, medical men proceeding to the tropics would be well advised to provide themselves with a copy, as there is much that will be of use to them. After a short introduction on the importance of control, the nature of malaria and the characters of the anopheline mosquito, a precise account of anti-malarial measures is presented, supported by useful diagrams. The book will certainly receive a warm welcome from all interested in the subject.

Copies are obtainable from the principal offices of the Associated Companies of the Shell Group, and in the British Isles application should be made to the Organising Secretary, Ross Institute, Keppel Street, London, W.C. 1.

Practical Bedside Diagnosis and Treatment. By Henry Joachim, M.D., F.A.C.P. Pp. x+834. London: Baillière, Tindall & Cox. 1940. Price 41s.

The purpose of this book is to give a detailed account of the clinical appearances, typical and otherwise, of the various medical diseases as seen by the clinician making his diagnosis at the bedside. The differential diagnosis is very widely discussed, and the accurate descriptions are punctuated by occasional references to the author's wide experience in whatever disease he is describing, an experience of which the reader is conscious throughout the work. The author has been very successful in his attempt to fulfil his purpose. The clinical descriptions are extremely full, easily readable and clear. This method of medicine may not appeal to every one as there is no reference to physiology or to pathology, and explanations for physical signs are not given.

The account of treatment is not quite so lavish or so masterly as the clinical descriptions. It is good, nevertheless, though at times irritatingly lacking in detail.

On the whole the book is very good, but, big as it is already, we feel it could be enormously improved by illustrations.
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Medical Guide for Flying Personnel. By Oberstsartz H. von Diringshofen. 1939. Translated by Major V. E. Henderson, M.A., M.B., C.A.M.C., Ret. Pp. 102, with 23 figs. University of Toronto Press. 1940. London: Humphrey Milford. Price 4s. 6d.

In this small book, knowledge important and absolutely necessary for flying personnel is set forth in a condensed and comprehensible form. The pilot must know what physical strains he and his crew may have to face, where the danger limits of physical endurance lie, and by what means these limits can be extended and exceeded. Further, he must know what deceptions of sensation may occur during blind flying, and such things as the effects of gravity and centrifugal force on the human body. Attention to such factors is necessary if flying is to be safe. The book deals with all the more technical medical problems that arise in aviation, and in addition with such things as general hygiene and sport for those engaged in flying.

It should prove invaluable to those who are responsible for the medical guidance and instruction of flying personnel, and of no little interest to the medical profession generally.

Atlas of Cardioroentgenology. By H. Roessler, M.D., F.A.C.P. Pp. xiv+124, with 166 illustrations. London: Baillière, Tindall & Cox. 1940. Price £2, 7s.

This atlas consists of material from sixty cases of heart disease. It contains a beautiful series of X-ray pictures of the heart in many different disorders. In addition, there are photographs of the pathological specimens from the same subjects, and in many cases reproductions of the corresponding electrocardiograms also. Full clinical data accompany the illustrations, so that a complete record of each case is available. The result is an extremely valuable collection of excellent material.

The book is a first-class piece of work, which should prove of immense assistance to the practising physician as well as to the specialist.

Biological Aspects of Infectious Disease. By F. M. Burnet, M.D. Pp. ix+310, with 9 figs. and 4 plates. Cambridge University Press. 1940. Price 15s. net.

The author suggests that the biological approach may give a better starting point for the study of human infectious disease than the more usual medical one, and at least an account of the matter along these lines may act as a stimulating complement to orthodox textbooks. The method is unusual, but has much to commend it.

A sketch is given of the aggressors—viruses, bacteria and protozoa.
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—and of the various defensive mechanisms of the body. Such matters as the spread of infection, the importance of animal reservoirs, the character of epidemics and the general principles of disease control form the subjects of special chapters. Some half-dozen of the more important infectious diseases are discussed at length. The author shows a wide knowledge of modern and older literature, and historical references are numerous. An interesting question is that of the appearance of “new” diseases such as encephalitis lethargica. Some of these discoveries have probably been of diseases which have been present, but unrecognised, for many years. Others appear not to have previously attacked man, or at least have never given rise to epidemics until recent years.

In an epilogue the author touches on the relationship of war to infectious disease, and mentions the possibility of the use of bacteriological methods in warfare, but points out that a really serious worldwide epidemic might perhaps do more to stimulate a sense of genuine international co-operation than anything else.

This fascinating story should appeal to all ranks of the medical profession.

Orthopaedic Operations. By Arthur Steindler, M.D., F.A.C.S.
Pp. x+766, with 322 illustrations. London : Baillière, Tindall & Cox. 1940. Price 50s.

Steindler’s first book on operative orthopaedics was published in 1925, and the new one, although not termed a second edition, has little reason for disclaiming relationship. It has indeed many of the attributes that betoken the growth to manhood; it is bigger, fuller, and altogether a more polished production.

The opening sentence in the preface makes the reader a little sad, for the author says the book is submitted to the profession as a final account of the writer’s experience. One would be sorry to think this is the last publication of Arthur Steindler, whose name for so long has meant so much in orthopaedic surgery, and one hopes that this final appearance may be like that of so many dramatic performances—final but not quite the last.

The volume is written in three parts—indications, technique, and results—and is based on the writer’s personal observations. The work will be of immense value as a reference book. “When so used, the reader will have to recognise the specific case which confronts him in the clinical situations described in the third part; next he will have to inform himself in the second part on the technique of the operative procedure advised in the third part. The statistics given in the second part pertain only to the operation as such; whereas those given in the third part pertain to the value of the particular operative procedure in the specific situation.” This has obvious disadvantages, and it is
quite difficult to get together all the information one would want on one particular subject from the book of reference.

Many of the operations and approaches are obsolete and could quite well have been omitted. Apparently Steindler himself does not use them but inserts them for reference. Nevertheless, all orthopaedic operations are described in some detail, and in most cases in sufficient detail to be of real practical value. Statistics of results are given in the third part and are very helpful, though naturally many of them are not from his own practice.

Though much can be criticised in this production, it is nevertheless one that should be in every orthopaedist's library. It is beautifully produced, and the line drawings and other illustrations are of a very high standard.

Surgery of the Hand. By R. M. Handfield-Jones, M.C., M.S., F.R.C.S. Pp. 140+viii, with 95 illustrations. Edinburgh: E. & S. Livingstone. 1940. Price 15s. net.

In the past, very many of us have consulted Kanavel's classic on Infections of the Hand, now we have its British counterpart. Mr Handfield-Jones is to be congratulated on producing this volume, full of the most vital information. The book is divided into three sections: Infections, Injuries and Other Surgical Lesions including congenital defects and tumours. Two-thirds of the text is devoted to infections and this section is probably of greatest general interest and importance. Apart from the chapters on the various infective lesions, all of which are excellent, if every one would read and re-read Chapter I which deals with the prevention of infection and the general principles of treatment, there would be fewer tragedies from this type of case. The author wisely stresses the importance of the means to restore function, a form of treatment too often sadly neglected. The illustrations throughout are excellent as is the production of the book as a whole.

Surgery of Modern Warfare. Edited by Hamilton Bailey, F.R.C.S. Parts I, II, and III. Pp. 480, with 502 illustrations. Edinburgh: E. & S. Livingstone. 1940. Price 12s. 6d. net each part.

The publisher's note states that this work "is intended for the surgeon who has to deal with the injuries associated with warfare. It is assumed that he is trained, but not necessarily highly experienced, in civil general surgery, and that he requires guidance on the special technique and management of the wounded." For its compilation, the editor has assembled some sixty-five contributors. Whatever the intrinsic merits of the book, it can be argued that sufficient
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experience of modern warfare has not been accumulated and sifted to make its pronouncements final; to some extent, therefore, it deals with methods which, at the end of the last war, had come to be regarded as those of choice.

Part I deals with war wounds in general and with certain special considerations. Hughes provides a compact and useful classification. Not every surgeon would agree with the advice given for the treatment of shock; and the sections on transfusion and infusion contain much material that should be quite familiar to the civil surgeon. The chapter on anaesthesia might well have been more elaborate. The local and general treatment of wounds is dealt with clearly, and these sections contain much useful advice: perhaps X-ray treatment for gas gangrene hardly merits the dignity of a separate chapter. Cole writes of Tetanus in a thorough and helpful manner, and many will be grateful for the chapter by Fleming on the bacteriological examination of wounds. In Part II McIndoe completes a useful chapter on the elementary principles of plastic surgery; this is followed by a recommendation of maggot therapy which is unlikely to be widely followed. There follow a series of articles dealing with wounds of the trunk; each is from an authoritative pen, and all contain both statements of general principles and practical directions which, when mastered by the young surgeon, will go far to give him confidence and to increase his efficiency. The next section deals with vascular surgery; the clear descriptions of modern methods of exposing the main vessels will be welcomed by senior as well as junior surgeons. This section is completed in Part III; the account of secondary hæmorrhage is especially helpful. Clear and practical help is given for treating wounds of peripheral nerves and tendons. Important chapters on the various methods of immobilising limbs follow: precise directions are given for the many uses of splints, Cramer wire, and plaster of Paris. Wounds of the hands and feet are fully considered; and the Part ends with a valuable chapter on wounds of the knee joint.

It is inevitable, in a work of this construction, that opinions occasionally conflict, and possibly the Editor has deliberately refrained from any attempt to standardise them: rightly or wrongly, the young surgeon must often choose for himself. The book is magnificently illustrated; we would expect nothing less from Miss McLarty. The publishers are to be congratulated on its type and on the high standard of reproduction of both half-tone and coloured illustrations. The parts are so arranged that when complete it will be possible to bind them in one volume.