

Reviews

CLINICAL ANAESTHESIA

A Practice of Anaesthesia. By W. D. Wylie, M.A., M.B. (Cantab.), M.R.C.P., F.F.A.R.C.S., and A. C. Churchill-Davidson, M.A., M.D. (Cantab.), F.F.A.R.C.S. (Pp. 1,056+xv; illustrated. £5 5s.) London: Lloyd-Luke (Medical Books) Ltd. 1960.

Perhaps we have been told a little too often that anaesthesia is a rapidly advancing specialty. Yet who would have believed at the turn of the century, when massive tomes were the rule in many medical fields, that one as massive as this would one day be necessary to cover the practice of clinical anaesthesia? Dr. Wylie and Dr. Churchill-Davidson have written one of the best textbooks on anaesthesia to date, and in a manner equal to the best in any other field; it is scholarly, comprehensive, and in good literary style. The post-graduate, the specialist, and even the researcher will find the answer in full to most of their questions.

The subject matter is arranged in somewhat novel fashion, largely under the three main headings of respiratory, cardiovascular, and nervous systems—the classical tripod of Life. Within these wide boundaries the information is treated wherever possible from a physiological standpoint. To give an example. In the section on the respiratory system the authors, in separate chapters, describe the anatomy, the mechanics and physiology of respiration, lung function, the anaesthetic gases, and the examination of the respiratory tract. Only then is the reader introduced to intubation and anaesthesia for pulmonary operations. Every chapter is followed by a good selection of references, in each of which the full title of the paper is given. Seven colleagues at St. Thomas's Hospital write certain sections, notably on shock and on water and electrolyte balance by K. E. D. Shuttleworth, and on blood transfusion by M. S. R. Hutt.

The publishers have bound the book beautifully as befits one of this importance and excellence.

W. W. MUSHIN.

THE PULMONARY CIRCULATION

Pulmonary Circulation. An International Symposium, 1958. Sponsored by the Chicago Heart Association. Edited by Wright R. Adams, M.D., and Ilza Veith, Ph.D. (Pp. 316+xv; illustrated. \$4.50.) New York, London: Grune and Stratton. 1959.

This book is an excellent example of the monograph at its best. It is confined to a single subject, the pulmonary circulation, which is considered from every angle and by those who are in the forefront of the investigative attack on the many unresolved problems of the "lesser circulation." Furthermore, each contribution has been subjected to the critical appraisal of those best qualified to judge. The verbatim reports of these discussions are most stimulating and lend a quality of vivid realism.

The symposium was divided into six sections, covering the historical development of the concepts of pulmonary circulation, the physiology of the pulmonary circulation, the pathology of the pulmonary circulation, the pulmonary circulation in primary lung disease, the pulmonary circulation in congenital heart disease, and the pulmonary circulation in acquired heart

disease. It is difficult to single out contributions of outstanding value from so much excellence; nevertheless it must be emphasized that great importance is placed on physical and mathematical aspects. This approach is exemplified by A. C. Burton's analysis of pulmonary haemodynamics in terms of the same factors which govern flow in peripheral vascular beds; his concept of the "critical closing pressure" is applied. A. B. DuBois contributes a delightful account of his studies on instantaneous pulmonary capillary blood-flow as measured in the body plethysmograph, with nitrous oxide as the flow indicator. Robert E. Forster provides a masterly synthesis of the volume, area, and diffusing characteristics of the pulmonary capillary bed. In this paper and in the subsequent discussion the importance of the kinetics of the $O \rightleftharpoons Hb$ reaction is emphasized. Fritts and Cournaud contribute a strictly quantitative assessment of the physiological factors regulating pressure, flow, and distribution of blood in the pulmonary circulation. The same scientific approach prevails throughout all papers.

This book is essential for all workers in this field; indeed, the reviewer has purchased several copies for his laboratory. It is also to be recommended to all clinicians who aspire to understand what they are doing.

W. MELVILLE ARNOTT.

PELICAN ON EPIDEMICS

Epidemic Diseases. By A. H. Gale. (Pp. 159. 3s. 6d.) Harmondsworth, Middlesex: Penguin Books, Ltd. 1959.

This excellent book in the Pelican series is written in simple non-technical language primarily for the layman, but it can usefully find a well-deserved place on the bookshelves of any member of the profession be he student, general practitioner, or consultant.

No attempt has been made to cover each and all of the acute or common infectious diseases which have been in the past or are at the present time prevalent in the British Isles. Those diseases with a low morbidity and mortality have been excluded because of their relatively undistinguished history and blameless character. The chief criterion for the inclusion of a disease is that it has at some time been epidemic in the dictionary sense of being prevalent at one time and not at another and at its zenith associated with a high mortality.

In the introduction some doubt is suggested as to the value of this study, because five of the seventeen diseases so selected have disappeared from the present-day English scene, or have become trivial. Each of these ghost diseases, however, presents a fascinating story in its own right which illustrates the unpredictability of the changes in the virulence of a causative organism and of the immunological reactions of a host population; it also illustrates, when considered from the remedial aspect, the profound influence that improved nutritional standards and hygiene have had as contrasted with the curiously small effects of specific prophylaxis or therapy.

History repeats itself: within very recent memory there has been a most striking reduction in the mortality and morbidity previously associated with scarlet fever, diphtheria, whooping-cough, and the enteric fevers, whereas in the same period of time the toll exacted by influenza and poliomyelitis has increased in spite of the immense expenditure of research, time, and money on

prophylaxis and therapy. This book is a salutary reminder that the acute infectious diseases are not static either in their clinical manifestations or in their ability to become a scourge to human populations when some change of environment, climate, or chance variation in the causative organism fans the flame of infection into epidemic proportions.

From the beginning to the end of our professional lives we must always consider ourselves to be students, and, as such, cannot fail to find in this small book a record of events which are not only of very great historical interest as regards the past but also provocative of thought about the unpredictability of the future.

F. G. HOBSON.

RADIOGRAPHIC TECHNIQUES

Medical X-Ray Technique. Principles and Application. By J. G. Van der Plaats. (Pp. 480+xii; illustrated. 57s. 6d.) Eindhoven: Philips' Technical Library. London: Cleaver Hume Press, Ltd. 1959.

This book by Professor van der Plaats, one of the most eminent Dutch radiologists, covers the physical and biological principles in the application of x rays in radiodiagnosis and radiotherapy. It should prove very helpful to students, with one important caveat. The section of the book which is not good is that relating to radiation hazards. There is, first, no mention of the association of leukaemia with relatively small doses of x rays administered to the unborn child in such procedures as pelvimetry, and no mention of the question of threshold dose. Secondly, there is inadequate consideration of the principles of protection for the patient.

In the chapter dealing with the protection of insulated tubes one is given the impression that leaks do not occur from modern tubes, but in many departments there are modern tubes in use which are still not perfectly safe, and these may be used for many years unless juniors know how they may be tested. Likewise there is also the important matter of checking leakage from the cone or lightbeam diaphragm assembly. Even new equipment frequently shows a leak when tested under working conditions. There is no consideration of the importance of limiting off-focus or stem radiation by reduction in the size of the window of the tube—a factor which has so much to do with the limiting of scatter and gonad dose. The reader is also given the impression that he is safe provided he wears a lead apron with "adequate" lead equivalent, but it should be pointed out that this is not so unless from time to time the apron is tested when it is worn. For example, it may be found that a lead apron which is adequate for most purposes is inadequate for protection of the operator's gonads when he is standing close to a fluoroscopic x-ray table taking films with a high kilovoltage technique.

There is also no mention of the importance of colour vision in the preparation of the eyes for fluoroscopy: mention should be made of the type of lamps used for lighting a screening-room and the control panel. I expected to find a section on the use of x-ray goggles; specifying the size of the eye-piece and the colour of the material. There is also the question of glasses for those who have refractive errors or whose sight is failing. Finally, a book of this kind should include dosage tables which give some indications of the results that can

be obtained in radiography, both to the skin and to the gonad area, by varying the size of field, the kilovoltage, and the filters used.

These criticisms may seem hard. They should not detract anyone from purchasing this book, but it is hoped that they may receive attention in the next edition.

F. H. KEMP.

GLAUCOMA

Symposium on Glaucoma. Transactions of New Orleans Academy of Ophthalmology, 1957. Editor: William B. Clark, M.D., F.A.C.S.; Associate Editor: Joe M. Carmichael, M.S.J. (Pp. 314; illustrated. £5 ls. 6d.) St. Louis: C. V. Mosby Company. London: Henry Kimpton. 1959.

This symposium is of the didactic type. It is in no sense a round-table discussion of the controversial growing points of the subject in an attempt to reach the answers for which several people may be groping, approaching it from different routes. Rather is it a platform for teaching and therefore eminently suited for the audience that assembles at the New Orleans Academy of Ophthalmology and equally useful for the average ophthalmologist to read. The experts are there; each has delivered one or more lectures on glaucoma itself and the vast area of knowledge, anatomical, biochemical, and physiological, that borders on it: Theobald on anatomy and pathology, Swan on surgical anatomy, Becker on biochemistry, Morton Grant on aqueous production and tonography, Zimmermann on mucopolysaccharide deposits, Scheie on tonography, Haas on perimetry and provocative tests, Maumanee, Swan, and Becker on medical control; and several of these on surgical treatment. The lectures are simple and clear, and, though they contain little new, they give a well-balanced picture of the disease, its causation, pathology, and treatment as envisaged by a number of America's leading ophthalmologists.

At the end question-time arrives; queries are passed up from the audience to the experts, whose answers are given. This is the best part of the book; and certainly if they all answered them as clearly and beautifully as we read, the experts are very good indeed. Here, as often occurs, much information on incidental matter of great interest and practical importance emerges which is usually missed in formal papers or standardized textbooks. It certainly repays reading.

STEWART DUKE-ELDER.

A SIXTEENTH-CENTURY ANATOMY

A Short Introduction to Anatomy. (Isagogae Breves.) By Jacopo Berengario da Carpi. Translated with an introduction and historical notes by L. R. Lind, and with anatomical notes by Paul G. Roofe. (Pp. 228+xi; illustrated. 37s. 6d.) Chicago: University of Chicago Press. London: Cambridge University Press. 1959.

A sound knowledge of human anatomy cannot be gained without dissection of the human cadaver. For lack of such dissection anatomical knowledge languished from 300 B.C. until A.D. 1300, when Mundinus of Bologna performed dissections and wrote (in 1316) his famous *Anothomia*, thereby qualifying to be called the "restorer of anatomy." The *Anothomia* was not printed till 1493. In 1521 Berengario da Carpi published a *Commentary on the Anatomy of Mundinus*, and in the next year followed this up by publishing a dissecting