# REVIEWS

## ANAESTHESIA, RECOVERY AND INTENSIVE CARE

By D. A. Buxton Hopkin, M.D. (Lond.), F.F.A.R.C.S.

The English University Press Ltd., London, E.C. 4 (Pp. 195; indexed, 63 illustrations; £1.25)

This book is definitely a useful book for nurses preparing for post-basic courses like Operating Theatre course, Intensive Nursing Care course, and Ward administration course. It is also quite satisfactory as an introductory book for undergraduates before embarking on their anaesthetic clinical posting.

For £1.25 it is within the means of such students. All the basic essentials of anaesthesia especially from the practical aspect is very clearly written. Many basic anaesthetic apparatus and circuits are very well illustrated.

The inclusion of such chapters as Respiratory Failure, Cardiac Arrest, Intensive Care and Obstetric Analgesia do indicate the increasing trend the world over of the fact that anaesthetists are required to work outside the confines of the operating theatres. This, I agree with Dr. Hopkin, is due to the skill acquired while in the operating theatres by the anaesthetists in the maintenance of complete homeostasis especially of the Cardiovascular, the Respiratory and the Renal systems. It is also true that the moment the anaesthetist stops practising anaesthesia his skill as an intensivist will also wane.

Dr. D. A. Buxton Hopkin presently consultant Anaesthetist, Charing Cross and St. Thomas' Hospitals, was not only a lecturer in Anaesthesia, University of Malaya, Singapore but was also the Senior Anaesthetist, Singapore in the early post-war period (1950).

### S. H. Tan

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## PROGRESS IN PARASITOLOGY

By P. C. C. Garnham

The initial part of the book deals in general terms with the concept of Zoonoses using various parasites, particularly protozoa, as an example. This is followed by a discussion on the "problems of the parasite" and then by chapter on the "problems of the parasitologist". This chapter reads like an autobiography and I found it the most interesting part of the book as it gives an insight into the working and thinking of one of the leading parasitologists of our time. In this chapter the author also gives very useful advice to young research workers and exhorts them to look for new ideas and not to be afraid to speculate for, "the turtle only makes progress when he sticks his neck out." The last chapter is a biography of eminent parasitologists and contains some delightful stories. The one I like most relates to Manson in which it is said he worked on the opposite of the same table as Karl Marx in the British Museum, one writing "Das Kapital" and the other "Notes on filarial diseases in Amoy". The author ends by asking which was the greater benefactor of mankind but tactfully does not answer the guestion himself.

The book does not present and is not meant to present the highly technical aspects of parasitology. It is written for the general reader and the scientist and will appeal to all medical people dedicated to the service of mankind.

#### V. Zaman

# A TEXTBOOK OF GENERAL PHYSIOLOGY

By Hugh Davson, D.Sc. (Lond.)

# J. & A. Churchill. Fourth Edition 1970 in Two Volumes. Pp. 1694. Price: £12

The first edition of this book was written with the intention to provide a comprehensive study of the features common to all forms of life. To cover sufficient information on recent research the original book has been revised extensively and consequently this edition is published in two volumes for the first time. It is a readable textbook on selected topics in general Physiology, the substance being mainly derived from and based upon original accounts. The author was guided by the requirements of several types of readers-the degree student in Physiology and in related Science subjects such as Zoology and Botany, and Medical and Clinical students who wish to be provided with a deeper insight into the subject beyond the mere essentials for an ordinary medical course. The book serves as basic teaching material which can be amplified by Seminar, discussion and the working of practical examples very essential to research workers and teachers.

Volume 1 is divided into three sections in which the author concentrates mainly on a fundamental up to date information of the structure, function, chemical and physical properties of cells. It is a very useful and essential reference to Science students in Cytology.

Mr. Davson presents his text by explaining the use of the latest experimental methods and techniques, for example, the use of the electron microscopes, histochemistry, radiography, cytophotometry, fluorescent antibody techniques, phasecontrast and interference microscopy for the study of various structural inclusions within the cell. Techniques used for studying fuctional changes and their mechanisms involved, using polarization microscopy and X-ray diffraction analytical methods are also included. From observations made of these experimental methods, the structure, functions and special properties of cells and their biochemical nature have been clearly described and illustrated.

Much attention has been devoted to what is increasing in importance in recent years, namely, the permeability and structure of cell membranes and the transport of water and salutes across the cell membrane and capillaries. These chapters provide a clearer understanding of the phenomenon of 'Active Transport' in different tissue cells.

The chapter on cerebrospinal fluid attempts to set out a recent theory that the fluid is elaborated by specialized cells rather than by simple filtration as was previously believed. Certain selected topics such as the absorption of sugars, fats proteins and bile salts from the intestine, the chemical composition and mechanism of gastric secretions and renal functions have been particularly brought up to date by cholic in Volume 1.

In order not to be misunderstood in view of the title of his work the author sought to justify the emphasis on these selected topics. While different readers may approach the text for different purposes this self-imposed limitation can nevertheless be appreciated.

In Volume 2 the first two sections are concerned with the electrophysiological properties of the excitable and contractile tissue i.e. mainly the three kinds of muscle and the nerve cells. The propagation of impulses along the neurone, the associated Action Potentials, chemical and electrotonic transmission across synapses, the responses of sensory receptors, the electrogram and the specialized activities of the cardiac muscle are all well presented. One chapter is entirely devoted and rightly so to the electrical characteristic activities of the smooth muscle.

The second section on the mechanism of contraction of muscle refers to the structure of striated muscle, the mechanical and thermal aspects of muscular contraction and the variations in structure and functions of the contractile machinery including the theories of the contractile process.

The last section deals entirely with the effects of light on the cell and organism. The author describes illustratively the photosynthetic and photodynamic action, and the response of pigments to light. The stimulating effect of light on the eye and photochemical aspects associated with vision are adequately expounded.

A praiseworthy feature of this work are the well-illustrated diagrams and electronic micrographic photographs which add to a better understanding of the topics discussed.

The book does not provide a full coverage of Physiology as a subject for medical and science students and cannot of course be recommended as a completely comprehensive standard text. It can certainly however be classified as an essential reference providing yet another useful addition to the understanding of Physiology worthy of acquisition for any medical or science library.