REVIEWS

NEW BOOKS

Recent Advances in Microscopy: Biological Applications. Edited by A. Piney, M.D., M.R.C.P. London: J. & A. Churchill. 1931. (12s. 6d. net.)

In this addition to the "Recent Advances Series" there are four sections each contributed by separate authors, viz., Medicine by A. Piney, The Living Eye by Basil Graves, Zoology by E. W. MacBride and H. R. Hewer, and Botany by E. C. Barton-Wright. As a result, a wide field of work, most of which should interest the medical reader, has been reviewed in an expert fashion. Particular interest attaches to the sections on Zoology and The Living Eye. In the former, the recent knowledge of the Golgi apparatus and mitochondria is excellently reviewed. After adducing evidence that the Golgi apparatus is real, consisting of a reticulate lipoidal material with probably an associated protein, and is capable of independent growth and division, the authors discuss the important functional part which it plays in synthetic processes, in particular its association with the production of secretory granules and its different behaviour in mucous and serous cells. In glandular organs, for example, the Golgi elements are, as a rule, situated between the nucleus of the cell and the lumen of the duct, and the position may be reversed in dysfunction of the gland, e.g., in the thyroid gland in enophthalmos. In nerve-cells, the Golgi is concerned in the formation of the Nissl granules, in the male germ-cell it forms the acrosome, or "cutting tip," as it has been called, of the spermatozoon, and in the cells of the intestinal epithelium it takes part in the resynthesis of fats from fatty acids and glycerol. In the same way, the structure and function of the mitochondria are discussed, and their relation shown to enzyme-production and surface-energy of the cell. Brief mention is made of the "dislocation" of the nucleus by x-radiation and its relation to variations and mutations of the organism.

In the section on The Living Eye, a full description is given—and beautifully illustrated—of the principles of the slit-lamp and its use for the microscopic examination of the anterior part of the living eye in combination with the Czapski binocular microscope. The author's suggestion that the "pictorial living processes seen so strikingly in slit-lamp microscopy might well be made a subject of demonstration in the curriculum of all medical students" is highly commendable.
The Medicine section gives a scrappy review of recent knowledge of the histology of various tissues and organs of the body. In it there is no mention, apparently purposely, of intra-vitam staining or *in vitro* tissue-culture; there are several typographical errors and no references. The section on Botany rather overlaps that on Zoology, and has not much of interest to the medical reader except on the morphology and division of bacteria. Finally, as an addendum to a volume packed with most useful information, one would have welcomed a short chapter on recent advances in the microscope itself.

**Nutrition Abstracts and Reviews.** (Issued under the direction of the Imperial Agricultural Bureaux Council, the Medical Research Council, and the Reid Library, and published by the Aberdeen University Press, Limited, Aberdeen.)

The rapidly growing subject of nutrition (human and animal) touches other sciences at so many points that workers have been finding increasing difficulty in keeping abreast of recent advances and in following the course of researches carried out in the various countries of the world. The purpose of this Journal is to collect under one cover abstracts of all literature bearing on nutrition. It is international in its scope. The publication of this Journal is, in a sense, a landmark, for it denotes the emergence of a new branch of science. The editors—Dr. J. B. Orr, Professor J. J. R. Macleod, and Miss Harriette Chick—are supported by a strong Committee of Management representing the three bodies under whose *aegis* the Journal is produced. There is, therefore, every reason to look forward to a successful career for this well-sponsored publication.

The part which we have received for review reaches a high standard of excellence, both as regards its content and its format. It consists of Volume I, Nos. 1 and 2 (October, 1931). This is priced 13s. net, and the annual subscription is one guinea: we are left to assume that in future the numbers will be published quarterly. Some idea of the scope of this Journal may be gathered from the statement that the editors, with their assistants, are reviewing some 450 periodicals, while others are being reviewed by corresponding editors abroad. Abstracts (beginning from January, 1931) have been placed in six main sections, and within each section they are arranged on the principle that papers of general interest come first, while the remainder are classified "in the order in which they are usually treated in text-books." This plan is subject to modification from time to time.

In addition to abstracts, the Journal will contain reviews. In some the main interest will be human nutrition, in others the nutrition of farm animals. Critical reviews, dealing with the present state of knowledge of different aspects of the subject and
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giving a bibliography of the literature, will be a feature, while other articles will be of a more general nature, expressing a point of view.

This Journal promises to play an important part in helping to advance our knowledge of nutrition. The low subscription rate should bring it within the reach of all those to whom its contents appeal. We would specially commend it to the notice of librarians and to those in charge of research laboratories. We trust that the inauspicious moment of its appearance will not lead to any financial restriction which would interfere with the usefulness of this new Journal.

Humour among the Doctors. By John Aye. With Preface by Ian Hay. The Ideal Library. London: The Universal Press. 1931. (5s. net.)

This volume is, according to the publishers, one of a series of "six humorous books in narrative form which mark a New Era in Literature," and the series is styled "Ideal, because it is certainly unique." While not prepared as regards the present volume unreservedly to subscribe to the above announcement, we may say that the book contains some amusing anecdotes, and not a few of quite respectable antiquity. In the preface Major Ian Hay recommends the collection to raconteurs as a means of materially increasing their reputation. We venture to think that such counsel may prove to be double-edged. We admit, however, that some of the tales will bear re-telling, even if re-reading would be something of a penance. The volume is, we believe, likely to attain some degree of popularity.

Notes on Radium Therapy. By Hector A. Colwell, M.B., Ph.D., M.R.C.P.(Lond.), D.P.H.(Oxf.). London: H. K. Lewis & Co., Limited. 1931. (6s. net.)

In relatively small compass this book gives an excellent idea of what radium therapy comprises. As the title indicates, its pretensions are modest, but it may be read with profit by anyone interested in the possibilities of this line of treatment. The intimate association of radium work and surgery is well brought out and the numerous difficulties and dangers to be circumvented receive due attention. A short but clear account of physical considerations is followed by a study of the action of radium and its clinical application. The use of radium in the various regions where it may prove of avail in the treatment of malignant disease is then discussed in an admirable fashion, and the chapter on the comparative results of operation and irradiation should prove of special
interest. Perhaps more optimism than usual is shown regarding radiation treatment of rectal carcinoma, but we are glad to note the advocacy in suitable cases of block dissection for malignant cervical glands. In the section dealing with radium applicators, the author rightly emphasizes the care which must be shown in handling and inserting needles if serious damage to them is to be avoided. No mention is made of boiling as a safe and efficient means of sterilization of containers before operation.

An Introduction to Hygiene. By W. Robertson, M.D., D.P.H., F.R.C.P.E. Edinburgh: E. & S. Livingstone. 1931. (6s. net.)

The emeritus Medical Officer of Health for Edinburgh and Leith has utilized his leisure in issuing this brief summary of public health administration and practice. The matter is admirably presented and in a direct fashion. It should prove very interesting to all those joining public health committees for the first time, in that it gives them a rapid conspectus of the many subjects under their control, and prepares them for the further education in detail which they will get from their own medical officer of health’s reports from time to time. For the medical student it seems hardly full enough, but should prove useful to him (or her) from the many practical applications embodied in it.

NEW EDITIONS

Gould’s Medical Dictionary. Edited by R. J. E. Scott, M.A., B.C.L., M.D. Third Edition. London: H. K. Lewis & Co., Limited. 1931. (30s. net.)

A medical dictionary differs from an ordinary lexicon in that it must be limited, so far as is reasonable, to those words and phrases which are proper to medicine, while at the same time it must be constructed to serve the purpose of an encyclopaedia. No department of activity is busier in the coinage of new words than that of medicine; indeed, it would probably be no exaggeration to say that creations are appearing daily. The strain thus thrown upon the compiler is, however, relieved somewhat by his being almost in touch with the coiners for the ready adjustment of exact meanings.

We have just completed an examination of the third edition of Gould’s Medical Dictionary, edited by Dr. R. J. E. Scott, and we are satisfied that this new issue is a worthy successor to its predecessors.

The student new to this book may find the American influence a little strange at first, but he will rapidly discover that the
editor has in many places had to double his work in order not to depart too suddenly from the English language as used east of the Atlantic.

Whilst "nitre" and "niter" both appear, "saltpeter" is the only rendering of the popular form. It is difficult to be reconciled to "maneuver" or to "meter" (metric unit), but we are not prepared to object in the same degree to "nevus" or "dyspnea." Although Dr. Scott, in the preface to this third edition, speaks of "anglicizing" certain French words, his critics might suggest that he has "Americanized" some of them.

These things apart, Gould's Medical Dictionary is crammed with information. There are exhaustive tables of bacteria, muscles, nerves, &c., to which the possessor of the work will find himself constantly referring, and he will have great difficulty in putting the book to any fair test from which it cannot successfully emerge.

Organic Chemistry for Medical, Intermediate Science, and Pharmaceutical Students. By A. KILLEN MACBETH, M.A., D.Sc., F.I.C., &c. Second Edition. London: Longmans, Green & Co. 1931. (6s. 6d. net.)

In this book, which deals with the principles underlying the study of organic chemistry, some chapters of the first edition have been revised and others extended, but the original plan of the work has been retained. After a short introductory section on the nature and development of the subject, the methods employed in the purification and examination of organic substances are outlined and the system of classification is explained. A series of chapters is then devoted to the chemistry of the aliphatic compounds in which the preparation, constitution, and properties of the hydro-carbons, halogen derivatives, alcohols, ethers, and other well-defined groups are clearly described. Particular attention is given to the study of structure as well as the reactions characteristic of each group, and in this part of the book the author has included a useful chapter on stereo-isomerism and optical activity. The treatment of the aromatic compounds in the second half of the work is equally concise and lucid. The text is adequately illustrated, and the exercises furnished in each chapter show careful selection. The book will be found to serve as an excellent introduction to the study of organic chemistry, and it can be warmly recommended to those for whom it is intended.