BOOK REVIEWS

A Biochemical Approach to Pathology. By M. J. R. Dawkins and K. R. Rees. (Pp. viii+128; 30 figures. 18s.) London: Edward Arnold. 1959.

Biochemistry (using the word properly as denoting an academic discipline) is a subject, a knowledge of which is indispensable to an intelligent understanding of medicine to-day. It is increasingly needed for competent diagnosis, for rational therapy, and for worth-while original work. The unfortunate habit of referring to chemical pathology as "biochemistry" has led some to think of biochemistry as a collection of receipts—suitable for a cook book—and this confused thinking has led at times to neglect of the important medical aspects of the subject. To this must be added a divorce between medicine and biochemistry and the view that biochemistry is fundamentally a "science" subject. It must be a matter for regret that the teaching of biochemistry is so often in the hands of teachers who, however eminent, lack medical training. As a result the importance of biochemistry to the medical practitioner is often not brought home to the student: he appreciates that the subject is one of importance to medical research but fails to see how it can help in the day-to-day practice of medicine or how it can help him to understand disease. The authors of this book say, "This book was written because we feel that advances in pathology will depend more and more on a detailed knowledge of cell metabolism." The book will certainly help to awaken interest in cell metabolism, but it will do more than that: it will help to awaken interest in the whole field of disordered biochemistry in relation to disease.

The book sets out in simple language some of the results of applying biochemistry to disease processes. Very little knowledge of chemistry is demanded and the book is very readable. It can be recommended confidently to students; there must be many registrars and consultants in pathology or general medicine who would benefit from reading it. It can be read in an evening.

ARTHUR JORDAN.

Biochemistry of Blood in Health and Disease. By I. Newton Kugelmass. (Pp. ix+543; 20 figures. £6 6s.) Oxford: Blackwell. 1959.

This book is divided into three parts: Blood as the transport system, as the regulatory system, and as the defence system. The first two are usually regarded as belonging to biochemistry, the last to haematology and serology.

In the reviewer's opinion, the attempt to relate "transport" and "regulation" to changes in the blood, with only very scant reference to such matters as renal function, gives an unbalanced picture, and many parts are very difficult to understand.

There is an enormous amount of information in the book, but the general impression given is that it is a rather uncritical re-write of the author's jottings and lecture notes; for instance, protein changes in multiple myeloma are referred to under several headings in the sections on "plasma protein excesses" and "plasma protein defects" on pp. 50–55, but, even on reading the whole sections carefully, the reader is left guessing as to what changes are likely to be met with in this condition or their significance.

The suggestion (p. 178) that "Cushing's syndrome with alkalosis produced in prolonged A.C.T.H. or cortisone therapy may be corrected by adrenalectomy or removal of a possible cortical tumour" is typical of the frequent careless writing. The amount of A.C.T.H. in normal blood is recorded as "0.5 m μ /100 ml." in Table XII, 2, on p. 267, as "15 μ g./100 ml." in Table XII, 1, and in the table of normals on p. 502; m μ presumably means milli-units, though it is defined in the tables of abbreviations as millimicrons, and the relation of m μ to μ g. is nowhere explained.

Throughout the book there are innumerable other examples of carelessness, and these, apart from the very high price, £6 6s., will tend to limit its general usefulness.

E. N. ALLOTT.

Laboratory Manual of Pediatric Micro-Biochemical Techniques. By Donough O'Brien and Frank Ibbott. (Pp. 164.) University of Colorado. 1959.

The methods in this paper-back manual from the Department of Pediatrics, University of Colorado, are not, in spite of the title, confined to paediatric applications, and could be applied to any hospital population. A few unusual items, e.g., the test for chondroitin sulphate B in the urine of patients with gargoylism, are included. The text is strictly confined to details of technique. Normal ranges are stated, but no information is given about the interpretation of results, and often the principles of the methods are omitted. Most of the blood analyses require 0.1–0.2 ml. volumes, no ultramicro procedures being given.

In a book of this type more might have been said about possible pitfalls in technique. Nevertheless this is a useful collection of methods which can be recommended for their simplicity and can be employed on British equipment without modification.

W. H. R. AULD.

Heavy Metals and the Brain. By John N. Cumings. (Pp. vii+161; 4 figures. 32s. 6d.) Oxford: Blackwell Scientific Publications. 1959.

This book consists of a thorough review of the literature (there are some 900 references) dealing with copper, mercury, and lead and their relation to the