Book Reviews

TEXTBOOK OF PATHOLOGY, 2 vols. By G. L. Montgomery. (Pp. viii + 516 + xvi; iv + 246; 713 figures. 147s) Edinburgh and London: E. & S. Livingstone Ltd. 1965.

There is a long tradition in Scottish textbooks of pathology, from Joseph Coats' Manual (1883) and D. J. Hamilton's mighty volumes (1889-94) to Robert Muir's Textbook (1924), now under Cappell's editorship. It is pleasant to welcome a newcomer, and this time from Edinburgh—a university with one of the oldest chairs of pathology in the United Kingdom and a notable history in teaching and research. Professor Montgomery's 'Textbook' is a noble book, two large octavo volumes, a little over 500 pages of text with an atlas of over 700 illustrations, the majority in colour; it weighs three kilograms and costs 7 guineas.

As one would expect from George Montgomery, it is written in a easy flowing style and interprets 'pathology' in its proper sense, the scientific study of disease. The first nine chapters are devoted to 'general pathology', the body's reactions to noxae whether microbic or chemical. It was a little disappointing to find that a discussion of the proximate mechanism, Peter's biochemical lesion, was often evaded: Why does the body react in the way it does to a nettle sting? Why does diphtheria induce a local necrotic lesion, and cardiac and nervous changes at a distance? On the other hand the appraisal of the significance of autoimmunity in disease and the possible pathogenesis of amyloidosis are excellent. The discussion of neoplasia is objective, integrating clinical with experimental work, the section on melanomata being a good example of this approach. The rest of the first volume considers the pathology of each of the systems, ending with a short chapter on the influence of genetic factors in disease. Open the book anywhere and there is clear discussion and illuminating examples from clinical experience and experimental work; references to published papers are not over-numerous, but offer the sort of additional information the inquisitive student might want; the index is full enough for easy search and retrieval.

The second volume of illustrations is almost exclusively the work of T. C. Dodds, the Director of Edinburgh University Photographic Unit, and so it is hardly necessary to say that they are superb in quality and just the right magnification to provide the necessary perspective; the block makers also deserve their measure of praise.

For the reviewer it was a pleasure to read and look at this book; yet there was also the sneaking doubt as to whether it was justified to produce such a lavish students' textbook, that savoured of the luxurious picture books which fill the bookshops at Christmas, and, unless laid negligently on the television set to reveal one's culture, are an awful nuisance on book shelves. In terms of book production, Montgomery's 'Textbook' is quite good value for 7 guineas, but it is a student's text, not a reference book, and one wonders, even in the welfare state, how many medical students could afford it and,

having bought it, could carry it around to read in bus or train, and what its turn-in value will be?

A. H. T. ROBB-SMITH

CLINICAL CHEMISTRY PRINCIPLES AND TECHNICS By Richard J. Henry. (Pp. xxiv + 1128; illustrated. £9 4s) New York and London: Hoeber Medical Division, Harper and Row. 1964.

This is another book describing the methods used in the laboratory in routine chemical pathology, but it is a book with a difference. The great defect in the majority of books in this field is an absence of detail; there is a very great tendency to give methods in cookbook style, the implication being that any fool can do it. In almost all methods there is a point (there may be more than one) at which things are particularly liable to go wrong; knowledge of this is most helpful to another worker taking the method into use. It is particularly this aspect of the work which is dealt with so refreshingly in Dr. Henry's book. Instead of giving a number of methods for any particular determination, he tends to give one method of which he has personal experience and he then discusses the particular difficulties of the method. It is a matter for regret that toxicological determinations needed in hospital work (such as the determination of salicylates or of barbiturates) and determination of the urinary steroids have not found a place.

This is one of the best books on chemical pathology that has appeared. It is strongly recommended to any laboratory doing chemical pathological determinations, even the simple ones.

ARTHUR JORDAN

COMPLEMENT A Ciba Foundation Symposium Edited by G. E. W. Wolstenholme and J. Knight. (Pp. xiii + 388. 60s.) London: J. & A. Churchill. 1965.

Whether you have a biochemical interest in complement, or you find it useful in identifying antigens and antibodies, or you think (as the Chairman of this Symposium leads me to suppose he does) that it must play an important part in many of the protective and pathological effects of antibodies, or you don't care a hang about it, you will find something to enjoy in this book.

There are now at least eight substances involved in immune haemolysis, four of them parts of what used to be C'_3 , and most of them having an enzymatic effect on one or more of the others. C'_{1p} is first attached to the sensitized red cell receptor, this component is then enzymatically converted into C'_{1a} , which affects C'_4 and C'_2 so that they attach themselves to the cell-antibody- C'_{1a} complex. The $C'_{1a, 4, 2}$ system is then converted to $C'_{1a, 4, 2a}$, and then takes up C'_3 , C'_5 , and C'_6 . Further addition of C'_{3a} and C'_{3d} occurs, and at this point, as Humphrey and Dourmashkin so beautifully show (p. 175, Figs. 1-3), holes develop in the red cell envelope, and the red cell breaks down.

There are excellent chapters on what is known about

the role of complement in auto-aggressive diseases, in haemolysis, *in vivo* and *in vitro*, on immune adherence, on opsonins, on bacteriolyses and on conglutinin and conglutinating complement. Those who don't care a hang will have a happy time counting the number of times people are honest enough to say 'It is not clearly understood how complement . . .'. They may also, and perhaps more usefully, wonder whether all the multitude of substances described really exist, or whether we make them ourselves by our purifying processes—not that this makes them any less interesting.

This is a good book: the contributors to the Sym-

posium have done their best to make the papers on their various subjects interesting and well worth reading, and the discussion is sharp, to the point, and often exciting. Better still, perhaps, is the absence of pointless controversy, the attempts to make the life of others easier by the development of a uniform nomenclature, and best of all, the new-found caution in applying results obtained from one animal's complement system to that of another.

One bit of advice: read Humphrey and Dourmashkin first, and enjoy the pictures. You can then savour (or sample) the rest with greater enjoyment.

C. L. OAKLEY

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