REVIEWS


This edition, which has appeared only four years after the original publication, is really a new volume of the “Recent Advances” series and, in fact, it is clearly stated that this issue does not supersede, but is definitely supplementary to, the first edition. Three-quarters of the subjects are new and, while the total number has been reduced by 10, the text is increased by almost 100 pages. These facts indicate the rapid and extensive developments in clinical pathology and it is therefore unfortunate that the publication of this edition was unduly delayed. There are very few references to work published in 1951 and it would appear that most of the manuscripts were prepared in 1950 or possibly earlier.

The subjects have again been divided into four main sections of approximately equal size: bacteriology, biochemistry, haematology, and histology, with a short additional chapter on laboratory design and equipment. Three of the sectional editors remain, namely, R. Cruickshank (bacteriology), E. N. Allott (biochemistry), and A. H. T. Robb-Smith (histology), but R. G. Macfarlane (haematology) replaces B. L. Della Vida, who has returned to Rome. The new chapter, written by Dr. J. E. McCartney, should prove invaluable to the many pathologists who are hoping to extend their departments in the near future, as it includes much useful information and advice on the construction and detailed fittings of laboratories. It must, however, be stated that the recommended accommodation for a large group laboratory seems grossly inadequate, particularly in view of many new, and sometimes complicated, tests described in the previous sections of this book.

The technical subjects have been well selected. They cover a wide range and, as they have been written by accepted experts in their respective fields, the general standard is high. There is a tendency to excessive compression, but most contributors have managed to include in their comprehensive surveys a useful practical summary of the appropriate techniques. In the case of bacteriology, the inclusion of the addresses of the many reference laboratories now available for special tests is welcome. Some points, which may be subjected to minor criticism, are the statement on p. 43 that the estimation of chloride (C.S.F.) is useless in the diagnosis of tuberculous meningitis; the description of several long-established techniques in the chapter on blood analysis; the absence of comment on the Chown test and halometry in the discussions of Rh tests and M.C.D. respectively.

This edition can be thoroughly recommended to all interested in the various aspects of clinical pathology, and it is a pleasure to congratulate the general editor and his colleagues on their excellent and well-balanced production. A further edition will doubtless be demanded and it is hoped that attention will then be given to the format of the book, which is now becoming inconvenient to handle.

R. W. FAIRBROTHER.


A textbook on pathology would seem to be, by tradition, associated with the Chair of this subject at Glasgow. As long
ago as 1883 Joseph Coats, whose supremacy as a pathologist in the west of Scotland—on the authority of Sir William Gairdner—"was unquestioned, and he had the countenance and support of the University long before he became a professor de facto," produced the first edition of his Manual. Coats was only appointed to the Chair five years before his death in 1899, but his work endured as a students' textbook for fully 10 years after 1903, when the fifth and posthumous edition was edited and revised by Louis Sutherland of St. Andrews. Coats was succeeded by Robert Muir, who entered into the Institute which had been called into being largely by the initiative of his predecessor, and in 1924 produced his own textbook which under his hand ran into five editions and seven reprints, the last being in 1946. Muir's textbook bore the stamp of his wide experience and mature judgment. It was sparing of frills, economical of words and, perhaps, almost austere in confining a subject which has such wide ramifications and lies at the basis of medical thought and practice within the manageable limits of a quarto volume of 991 pages. Nevertheless, as a source of sound pathological teaching, based upon personal observations, this textbook has been constantly remarkable. Within a limited compass was packed an immense amount of information, and there can be few pathologists in this country, even amongst those of the widest experience, who in times of doubt have not had a look within its red covers as a wise precaution before committing themselves upon any disputable theme.

In the sixth edition which is now before us Professor Cappell continues in the Glasgow tradition both historically and one might almost say geographically, for he, too, like Sutherland, held a Chair at St. Andrews. The format and general style of the sixth edition are unchanged, but the book has been very extensively revised. Increase in size, by the addition of about a hundred pages, has been attained without noticeable increase in volume by the use of a thinner and more glossy paper, which improves the appearance of the page and sets off the illustrations to better advantage. These have been increased from 599 to 636 and are almost wholly photographs. Their quality is uneven and some of them, e.g., Nos. 36, 75, 497, and 628, are not very informative, whilst the student might well complain that Figs. 508 and 510 look to him to be very much the same. Fig. 78 is poor and too darkly printed. On the credit side, however, some of the newer ones, e.g., Figs. 38, 63, 287a and b, are excellent. It is a moot question whether photomicrographs are the best means of illustrating a book used by students beginning the subject of pathology. Their accuracy, of course, is their undeniable virtue, but they do require some experience before they can be properly interpreted. It can, of course, be argued that the student may as well begin as he means to go on, and that as in the future most of the histological illustrations he sees will be photomicrographs, so he may as well be broken in to them at once!

Professor Cappell has achieved a notable success in this revision, which cannot have been an easy task, if for the single reason alone that the incorporation of new knowledge in an already well balanced presentation of a subject is always difficult. This, however, has been scarfed in so skilfully that no joints are noticeable. Selye and the "adaptation syndrome" get the better half of a page (one wonders how much they will have in the tenth edition), Fisher's Rh convention, fibrocystic disease of the pancreas, lymphogranuloma inguinale and granuloma inguinale (human ingenuity could scarcely have devised a more confusing nomenclature), sarcoidosis (described on page 99 and illustrated on page 539), protruded discs, agenized flour—all are there. There is a pleasing simplicity in the treatment of the reticuloses. We note the attribution to Heggie of an earlier observation of the "Trueta" or "Oxford" renal shunt. Perhaps it is confusing that lipomatosis of the heart wall is also called fatty infiltration, more especially as it is also conceded that excess of fat in the
parenchymatous cells of myocardium, liver and kidney is an infiltration—a view which is doubtless correct. A new and welcome feature is a short bibliography of monographs.

"Muir," as it is long likely to be called, is in safe hands and continues to be, as it has always been, a good sound textbook of British pathological teaching. The new edition worthily upholds the high tradition of a great school of pathology and a famous nursery of pathologists.

J. H. Dible.

Blood Transfusion in Clinical Medicine.

The arrival of this new book will be widely welcomed by workers in the field of clinical pathology and transfusion techniques. It sets out to cover the whole field of transfusion, including the clinical laboratory and experimental aspects. The first chapters are in the main theoretical, and consider at considerable length the present knowledge of what happens to the chemical and cellular components of blood on storing. Modern methods such as differential agglutination are compared with other estimations using radioactive materials, and their close agreement is shown, for example, on the survival time of red cells. The effect of storage on the survival time of red cells after transfusion is also considered, and ideal recipes for preserving solutions are described. Blood volume techniques are compared, and physiological and pathological variations briefly discussed. An excellent chapter on the life span of red cells shows the wide variations which are found when cells from patients suffering from different diseases are compared, and much of this chapter recapitulates the author's original work. The indications for transfusion in such conditions as haemorrhage, burns, anaemias, and leukaemias are also discussed, and particularly valuable will be the warning regarding transfusions in severe anaemias, and the safety measures which must be adopted to prevent overloading.

Then follow four chapters on the blood groups and blood grouping techniques. As we would expect from the author, these are most carefully and clearly computed, and the newer blood-group systems are adequately described. In the chapter on techniques, details of preparation of antisera and elution techniques are particularly well done and easily followed. The author has a practical approach to the vexed problem of compatibility tests, and divides the immediate and urgent techniques from those which can be done at leisure. This journal has published several differing papers on compatibility techniques, and readers will readily accept Mollison's conclusions that carefully controlled techniques which provide complete safeguards must be adopted to prevent transfusion reactions. The author recommends as the standard procedure a cross-matching technique, in which a 2% suspension of donor's cells in 20% albumin is used, and the results read after two hours' incubation. This procedure need only be modified in special cases where there have been previous transfusions, possibly with reactions, or any chance that the patient's blood contains immune iso-antibodies. In these cases in view of the possibility of zoning and of antibodies which do not agglutinate cells in albumin—e.g., Duffy—the ordinary test in albumin should be supplemented by the indirect Coombs test. Deviation from these rules should be allowed only in real emergency, and here the author prefers the modified Diamond slide test. In this issue an investigation by Dodge arrives at an identical conclusion (p. 102).

Transfusion reactions, including haemolysis, transmission of infection, reactions to pyrogens, allergic reactions, air embolism, and jaundice are well described in the following chapters, and the book ends with an excellent description of the normal blood pictures in newborn infants, haemo-