BOOK REVIEWS

Recent Advances in Pathology. By various authors. Edited by G. Hadfield. London: J. and A. Churchill, Ltd. 6th ed. Pp. 374; 86 illustrations. Price 30s.

This latest edition of a familiar and useful series departs from former custom in the adoption of a group of nine contributors who provide 12 chapters dealing with various aspects of morbid anatomy. Allowing for certain departures it is much the same mixture as before. G. Payling Wright brings the theories of inflammation up to date, and gives an interesting section on allergy. He might perhaps have emphasized more strongly the important European work that has brought the plasma cell into the limelight in immunity reactions, in antithesis to the earlier American work on lymphocytes in the same field. The chapter by J. Gough on diseases of the lung is particularly valuable for his authoritative account of the industrial pneumoconioses, a subject in which his own research work is so well known and appreciated.

The rather arid topic of the classification of Bright's disease gives place to a chapter, by G. M. Bull and J. H. Dible, on renal function. This includes a discussion of acute tubular necrosis (otherwise known as "lower nephron nephrosis") as well as a survey of Bull's recent work on renal function at the Post-graduate Medical School, London. The wisdom of attempting a review of recent advances in the whole field of endocrinology in the space of one chapter of 58 pages was perhaps questionable, and the result is unsatisfying. There may also be some disappointment that such actively developing lines in pathology as histochemistry, and the effects of radiations of different kinds on living tissues and biochemical systems, have received no attention. They might indeed have replaced the sections on experimental carcinogenesis, since the latter, though of manifest importance and active development, have been well presented in other recent publications. Perhaps the next edition will take some stock of these.

The other chapters on "Reticulosis and Reticulo-sarcoma" and "The Cardio-vascular System" by C. V. Harrison, and "The Liver" by the editor, embody recent advances relating structural to functional changes in a way that will be found helpful to advanced students and teachers, all of whom will find the volume as a whole very readable and stimulating.

DOROTHY S. RUSSELL.

Fibrocystic Disease of the Pancreas. Edited by M. Bodian. 1953. London: William Heinemann Medical Books, Ltd. Pp. viii + 244; illustrated. Price 63s.

This monograph is based on the extensive experience of fibrocystic disease of the pancreas and the

kindred condition of meconium ileus that Dr. Bodian and his collaborators have had at the Hospital for Sick Children, in London. It is divided into five chapters: (1) an account of the earlier literature on this disease; (2) detailed clinical and clinico-pathological studies on cases examined personally by the authors; (3) an investigation into the familial distribution of the disease; (4) an account of the morbid morphological findings in fatal cases; and (5) a discussion upon the possible pathogenesis. Each of these chapters forms a complete essay in itself. Two appendices are added: the first gives summarized case records on 116 patients studied by the author and his colleagues personally, and the second discusses the nature of the possibly related pancreatic dysplasias.

Of the clinical studies, the various types of laboratory investigation and their evaluation will be of most interest to readers of this JOURNAL. Amongst the tests described, the estimation of the tryptic activity of the duodenal contents, as assayed by Andersen and Early's gelatin digestion method, has proved to be the most informative and safest diagnostic aid. The determination of the proteolytic activity of the faeces has some value as a screening test, but it cannot be regarded as a reliable guide in diagnosis. Of the other ancillary tests, microscopical examination of the stools was found to be of considerable value, though full of pitfalls for the inexperienced.

The chapter on the familial incidence of the disease is based on a careful "follow-up study" by Dr. C. Carter of 77 index cases that had been admitted to Great Ormond Street between 1948 and the date of preparation of this book. The analysis of the pedigrees is careful and cautious, and the conclusion reached that there is a strong *prima facie* case for regarding the disease as inheritable. "The simplest genetic hypothesis which covers the findings best is that the condition is determined by a recessive gene."

The largest and most detailed chapter is that which deals with the morbid morphology of meconium ileus and fibrocystic disease of the pancreas. In it are described very fully the changes found at necropsy in infants who died at various ages; it thus provides the material needed to interpret the progressive clinical features of the established disease and to separate the secondary from the primary tissue changes. As might be expected, the greatest space is devoted to the lesions in the pancreas and the respiratory tract, but the alterations found in other diseased organs are also considered thoroughly.

In the short concluding chapter the editor reviews his material and its interpretation. He believes that there is much clinical and pathological evidence to support the view that meconium ileus should be closely linked with fibrocystic disease of the pancreas, and possibly be regarded as its earliest manifestation.

The primary aberration from which all the later disturbances in the intestine, pancreas, liver, and respiratory tract follow appears to be an abnormally high viscosity of the secretions produced by the mucus-forming glands in all the affected organs. So firmly does he hold this view that the monograph has been subtitled "A Congenital Disorder of Mucus Production—Mucosis." From this initiating mechanical interference with the flow of the secretions spring all the various obstructive disturbances in the many affected organs which later dominate the syndrome and determine its many clinical manifestations. Of particular interest to those concerned with the treatment of the respiratory complications in this disease is Dr. Bodian's view that the squamous metaplasia in the bronchial mucosa is more dependent on infective irritation than on any deficiency in the absorption of vitamin A.

The book is well produced and is copiously and beautifully illustrated from the editor's large collection of specimens and records. The photomicrographs especially will prove of value to morbid histologists seeking to obtain authoritative assistance in diagnosis.

In this volume Dr. Bodian and his colleagues have added a valuable monograph to medical literature. It is the fruit of a carefully conceived study of this interesting and important disease which has been carried through persistently and conscientiously for a decade. It might with advantage to British medicine be taken as a model for other pathologists who have special opportunities for the investigation of particular diseases of a similarly interesting nature.

G. PAYLING WRIGHT.

Renal Cortical Necrosis and the Kidney of Concealed Accidental Haemorrhage. By H. L. Sheehan and H. C. Moore. 1952. Oxford: Blackwell Scientific Publications. Pp. 186; 64 figures. Price 35s.

In presenting this study of renal cortical necrosis and examples of other lesions that follow upon concealed accidental haemorrhage—examples of lesser ischaemic renal damage—the authors are most fortunate in two respects; first, on account of the size and range of their series of cases, which in this single collection equals the total of pregnancy and non-pregnancy cases in a review and analysis of authentic cases reported up to 1941, for it has long appeared that the conflicting views on renal cortical necrosis have resulted from the limited number of cases studied by independent authors. Secondly, the authors are fortunate in the time of their work for, although the report is based largely on material collected between 1935 and 1945, the studies were made in the post-war years (the literature is reviewed up to March, 1952), and so it has been possible for the authors to interpret their findings in the light of recent work on the renal circulation and on the wartime renal studies in crush syndrome, incompatible blood transfusion, etc.

In the renal damage seen in 67 fatal cases of concealed accidental haemorrhage it has been possible to distinguish different grades ranging from minimal change attended by proteinuria and tubule casts to proximal convoluted tubule necrosis, then to patchy and finally to gross cortical necrosis, and to equate these to varying duration and levels of ischaemia. The initial renal lesion is held to be cortical vascular spasm which begins at glomerular level, is of a few minutes' to a few hours' duration, and is followed by relaxation of spasm, recirculation of blood, with or without new spasm developing in some part of the interlobular artery. The second period of ischaemia may last from a few hours to 20 to 30 hours. Thrombosis is regarded as a late secondary phenomenon. The aetiology of the spasm is not clearly elicited, but the sequence is thought to be the stimulus of uteroplacental apoplexy followed by neurogenic spasm of the renal cortical arteries. Other views on the aetiology are discussed briefly.

Contrary to the usual custom in scientific papers there is little preamble by way of review of the literature. The presentation is designed on detailed description of the findings in ascending grades of renal damage with brief notes of the authors' cases, then of the cases from the literature that correspond to the several grades. The illustrations are clear; the several histological features are dealt with at length.

The occurrence of renal cortical necrosis in non-pregnancy cases is considered, and chapters on general pathology and cognate lesions are included, as is also one on the clinical aspect during the puerperium.

One feature which stands out in a paper of 186 pages in length is the use of U.P.A. throughout for the term "uteroplacental apoplexy" and R.C.N. for "renal cortical necrosis." This strikes a colloquial note which is echoed at intervals and enlivens the text.

The book is of Blackwell's usual standard in the series which includes *Studies of the Renal Circulation* and *The "Neurality" of the Kidney*.

J. F. HEGGIE.

Modern Trends in Forensic Medicine. Edited by Keith Simpson. 1953. London: Butterworth & Co., Ltd. Pp. 327; 133 illustrations and 2 colour plates. Price 60s.

This work "is designed to review—for the pathologist who is entrusted with medico-legal autopsies, for the forensic science worker, and for the barrister—the last 10 years' experience in the subject" (editor's preface). The title might well stir the pulse of pathologist and potential criminal alike, and the pages will be turned to learn of the latest developments for settling forensic medical problems. The editor himself provides five of the 12 chapters; 10 collaborators the rest. For pathologists not engaged in the forensic field the most interesting sections are those on neonatal deaths, where G. R. Osborn discusses the difficult problem of pulmonary changes,