

**The Biochemistry and Physiology of Bone.** Edited by GEOFFREY H. BOURNE. (Pp. 875; illustrated. \$20.00.) New York: Academic Press Inc. 1956.

This excellent and comprehensive account of the biochemistry and physiology of bone by 28 contributors clearly succeeds in the avowed intention of providing a complete survey of the additional knowledge gained as the result of the research in almost all aspects of bone of the last quarter of a century.

The subjects covered include full accounts of each of the basic constituents of bone, ground substance, collagen, and mineral, as well as detailed studies of osteogenesis and biochemistry. The chapter on radiation effects is a valuable feature, and considerable space in this book has been rightly devoted to the effects of the ductless glands on bone and bone growth. The title does not, however, do justice to the wide scope of the contents; of necessity there is constant reference to disease in almost all chapters, and the chapters on vitamin C and vitamin D are much concerned with pathology, while that on pathological calcification is one of the longest in the book. This, incidentally, would benefit by sterner editorial pruning. Each chapter has been written by an acknowledged authority in his field who has made original contributions to the literature, and an idea of the thoroughness with which the survey has been carried out is well illustrated by the fact that one whole chapter is devoted to the osteoblast and another to the osteoclast. That these two chapters are written by different contributors certainly shows that this is, indeed, the age of specialism. As the Editor, Geoffrey Bourne, states in the preface, some overlapping between chapters is inevitable. This has not led to serious discrepancy or confusion, but a minor contradiction is found between the statement in chapter 15, p. 470, that fracture callus is formed by the differentiation of granulation tissue, and the statement in chapter 16, p. 482, that the invasion of blood clot by granulation tissue has nothing to do with the formation of fracture callus.

A presumed error of diction is found in chapter 4, where we find (p. 100) the statement . . . 'the existence of these polysaccharides in both tissues is not surprising in view of the *formation of bone by calcification of cartilage*' (reviewer's italics).

The illustrations are, in the main, very good, but some photomicrographs suffer from the paucity of space allotted to them.

References to the literature are numerous and up to date, and are found at the end of each chapter; and there is a complete author index as well as a subject index at the end of the book.

The paediatrician will find of especial interest the chapters on vitamin C and vitamin D, on the effects of radiation, of hormones on pituitary and skeletal development, and the chemistry of calcification.

This book can be confidently recommended to both research workers and to clinicians, and to all teachers of medical students pre-clinical and clinical. The pathologist should certainly possess this book.

The Editor and his collaborators are to be congratu-

lated on having succeeded in making a major contribution to the world literature on bone.

The reviewer is relieved to find after the exhaustive discussions on the roles of the osteoblast and osteoclast that he may continue to believe that osteoblasts form bone and osteoclasts remove bone; and to find also that nothing is adduced in this book to refute the basic teaching of S. L. Baker that pathological changes in bone structure can be mediated only through the operation of the two opposed processes of osteoblastic deposition and osteoclastic resorption.

**Das Skelett des Kindes.** By W. SWOBODA. (Pp. xii+184; 199 figures. DM. 48.—) Stuttgart: Georg Thieme. 1956.

This new monograph deals with the skeleton of the child, its development and diseases, congenital and acquired.

The first chapter describes briefly the clinical and radiological methods of examination of the skeleton; the second chapter gives a fuller account of radiological diagnosis of skeletal abnormalities. Then follow chapters on developmental, endocrine, nutritional, metabolic and inflammatory conditions and those affecting the reticulo-endothelial system. The last two chapters contain a much briefer account of neoplastic and traumatic conditions.

The writer does not confine himself to describing the skeletal abnormalities but makes brief reference also to aetiology, symptoms, diagnosis and therapy. It is indeed astonishing how much valuable information he has managed to compress into 165 pages.

Adequate reference is made to important English and American papers, though naturally the continental literature is quoted more extensively. Unlike some medical writing in that language, Dr. Swoboda's German is easy to read, even for those whose knowledge of German is not great.

The book is beautifully produced and the quality of the numerous reproductions of radiographs is high.

Though it is primarily written for paediatricians and radiologists, who will, no doubt, value it highly, this book has something to offer to the endocrinologist and orthopaedic surgeon. To the paediatric radiologist it may well become a standard work of reference.

**Die Pathologie des Kindlichen Pankreas** (Pathology of the Infantile Pancreas). By GERHARD SEIFERT. (Pp. x+151; 109 figures, 21 in colour. DM. 52.—) Leipzig: Georg Thieme. 1956.

In 1924 Nakamura published an anatomical study of the infantile pancreas based on less than 100 cases from the department of Ghon, and no example of fibrocystic disease was included in this series. Since then the interest of paediatricians and pathologists has been concentrated on this disorder and several monographs have been published, usually attempting to support one or the other view on the pathogenesis. The great amount of work which has been done in recent years on the morphological and functional pathology of the infantile pancreas makes Dr. Seifert's monograph a