ORTHOPAEDIC DISEASES. PHYSIOLOGY—PATHOLOGY—RADIOLOGY. By Ernest Aegerter, M.D., Professor of Pathology and Director of the Department of Pathology, Temple University Medical Center and School of Medicine; Professor of Orthopaedic Pathology, University of Pennsylvania Graduate School of Medicine; and John A. Kirkpatrick, Jun., M.D., Radiologist, St Christopher's Hospital for Children; Assistant Professor of Radiology, Temple University Medical Center. 10 × 7½ in. Pp. xii + 602, with 354 figures. Index. 1958. Philadelphia and London: W. B. Saunders Company. 87s. 6d.

This is one of the best, most helpful and most interesting orthopaedic books I have ever read. The authors, a pathologist and a radiologist, have aimed at reviewing almost all the known skeletal disorders, describing and correlating their pathology, clinical features, radiology and prognosis. In fact, this is what we have been waiting for: a study of the natural history of orthopaedic diseases. Modestly (and quite incorrectly) disclaiming originality, they describe the book as “a starter.” It’s a superb start.

The first six chapters form an introduction dealing with the anatomy and physiology of bone, especially as revealed by such modern techniques as the electron microscope and phase-microscopy. The rest, a total of twenty-two chapters, falls into sections dealing with disturbances in skeletal development and disturbances in the normally formed skeleton, and with tumours and tumour-like processes. In each group, indeed in each disease, discussion is critical and practical, based essentially upon the observed behaviour of the disorder in question. Speculation is discouraged: “the application of presumption dressed in the garb of fact.” Everything is questioned, even the assumption that a disease is congenital if it has not been observed in the new-born. Animal studies receive no more than their proper importance. Bone healing in the dog and the cat being “little more alike than their temperaments,” conclusions drawn from them are not necessarily applied to the human. Of course, a few heresies have survived the authors’ razor; the association of hyperaemia with “decalcification,” and especially the reverse (page 43), is not a causal relationship, and one feels that the term “diffuse halisteresis” (page 190) is unjustifiable to-day. It is also odd to find post-traumatic osteoporosis accepted as “secondary to alterations in blood supply due to nerve impulse changes”; and is vitamin-D deficiency common “particularly among politically oppressed groups”?.

The classification of some of the diseases studied will arouse surprise, though a critic will usually be disarmed by good and logical reasoning in support of the authors’ ideas. I doubt, however, if the inclusion of pigmented villonodular synovitis among the infectious diseases of bone is really justified; and is there evidence quite good enough to put non-osteogenic fibroma and unicameral bone cyst among the circulatory disturbances? Why not have a section on lesions which cannot yet be classified? These criticisms are, however, minor and perhaps carping.
Particular praise should go to the chapters on parathyroid disorders. The account of ischaemia of bone is excellent. I suppose most of us will look most closely at the section on tumours. This is first rate. Of course, there is a new classification, for "the only perfect classification is that one constructed by its author." The term "osteogenic" has to be retained for a group of tumours, but your reviewer will not be alone in welcoming the dropping of the term "osteogenic sarcoma." Tumours, as these authors insist, must be classified according to their behaviour and not solely upon their morphology. "Any classification of a disease which is not concerned with the manner and extent to which the patient is affected is tedious pedantry," and so the term "osteosarcoma" is used to include some tumours of bone which differ from osteogenic sarcoma only in that the cells are not seen to produce osteoid. The concept of "osteoclastoma" as a disease-entity receives commendably short shrift, the authors stressing the near impossibility of distinguishing histologically such very different lesions as the giant-cell tumour and the "brown tumour" of hyperparathyroidism. "Ewing's tumour" is retained, to the regret of your reviewer, who must consider himself on the side of the "few distraught writers" who cannot distinguish this "tumour" from metastatic lesions or from reticulum-cell sarcoma.

There are minor defects which will certainly disappear in later editions. Many page references in the introductory section are inaccurate. Pott was not knighted, nor did he describe spinal tuberculosis. Tuberculosis sicca, if it exists at all, is sicca, not sica (dry, not a dagger). A few of the illustrations could be improved. One, purporting to show the deformity of osteomalacia, is surely a radiograph of an old idiopathic scoliosis with, perhaps, an added osteomalacia. The authors apologise for imperfect section-cutting in some of their histological illustrations. Of course, bone sections without folds in them are very difficult indeed to prepare. The format and the publication are admirable. I detected no more than three misprints (caption to Fig. 61: page 81, line 27; and page 293, line 16).

I thoroughly enjoyed reading this book. The style is straightforward and interesting; the presentation is clear and forceful. It is one of the most important books of recent years. If it does not become a classic, so much the worse for orthopaedic readers. I shall find it a constant source of reference and of pleasure. Its authors have every reason to be proud of their achievement.—D. L. Griffiths.


Here are two magnificent volumes, the best yet produced on the Continent, which owe a great deal to the inspiration of Watson-Jones and include several illustrations copied from him. If published in English they might well tear a leaf or two from the laurel crown so long worn by that author. In style they are a combination of Watson-Jones and Böhler—Watson-Jones in systematisation, well designed illustration and colour but not in literary merit—Böhler in thoroughness, sequential black and white illustration, and the appeal to the over- anxious of the Böhler questionare. This time it comes in the guise of a list of errors terminating the description of each fracture. They tend to be a little repetitive, and, seeing the excellent review of first principles in Volume I, it seems hardly necessary to include such errors as "not to examine the unfortunate victim completely," "to fail to institute immediate treatment for shock, haemorrhage and pain," and "not to apply a local and general antibiotic in a sufficient quantity."

Of the two volumes, the first is inevitably the more appealing to the reviewer and less so to the critic, because general principles admit little divergence of view. The volumes are beautifully set out with abundant illustrations, clear and to the point. Anaesthetics, plastic surgery, radiology, rehabilitation, plaster technique, instrumentation and traumatic aneurysms, are all included. Nothing escapes, from the mechanics of the fracture to those of artificial limbs. A few points strike one—bones (and large ones at that) are shown sutured on one side with catgut or kangaroo tendon for stabilisation. I am less worried about the fate of the kangaroos than the fate of the graft, for which this fixation would appear inadequate, and plated stainless steel wire appears an adequate substitute. In the discussion of gas gangrene, the value of amputation through the joint to avoid wide exposure of muscle is not mentioned, nor is local removal of an affected muscle group in the early stages recommended. The dosage of penicillin advised is quite inadequate. While the advantages of the Kuntscher nail as the most effective method of fixing the femur is recognised, the use of screws in spiral and oblique fractures of any kind is omitted.