is made of the value of differential white cell counts on synovial fluid, apart from a somewhat misleading statement in a later chapter that the "presence of many polymorphonuclear cells usually indicates a specific bacterial infection rather than rheumatoid arthritis".

In the course of a comprehensive discussion on the pathology of rheumatoid disease the inclusion of collagen disorders is in keeping with the present tendency to bring these disorders within the scope of the rheumatologist. This chapter is profusely illustrated with excellent microphotographs, several of which are in colour. The authors point to the increasing frequency with which L.E. cells are found in rheumatoid arthritis and raise the problem of the relationship between disseminated lupus erythematosus and rheumatoid arthritis, but not all will agree that disseminated lupus erythematosus is unrelated to chronic lupus erythematosus.

Rheumatic fever is discussed from several aspects, particular attention being paid to the clinical manifestations and much recent work is included in the sections on treatment with cortisone, prophylaxis and prevention.

The section on rheumatoid arthritis comprises nearly 50 pages and gives an up-to-date picture under the headings aetiology, pathogenesis, pathology, symptoms, therapeutic criteria, classification of stages, differential diagnosis and treatment. This latter section includes a discussion on gold therapy, special attention being paid to the toxic disturbances and their treatment. Methods of administration of cortisone and hydrocortisone are discussed, due attention being paid to several recent papers, but no mention is made as to the selection of suitable patients for the exhibition of these substances. Due consideration is given to the relative and absolute contra-indications. The importance of infection and surgical procedures and the management of patients receiving hormone therapy is stressed.

There are short sections on variants of rheumatoid arthritis, rheumatic syndromes and uncommon joint disorders such as fluorosis and hydralazine (Apresoline) arthritis. The inclusion of this pharmaceutical arthritis is proof of the admirable co-operation between author and publisher, since the report referred to appeared in the literature only a few months before this book was published. Orthopaedic treatment is discussed in some detail as an adjunct to medical care and physiotherapeutic measures.

A valuable chapter on physical medicine treatment includes such important topics as the place of therapeutic and prophylactic exercises with considerable detail as to the ideal extent of such movements for each joint. A very practical section is devoted to rehabilitation, not in the usual vague terms but with particular emphasis on the patient's return to his place in society, his functioning within the limits of his disability and to the best of his capabilities. To this end many simple self help devices are described.

In a book so profusely illustrated, including many in colour, it is disappointing to find so few x-ray productions and these of poor quality.

R. I. MEANOCK.

Connective Tissue in Health and Disease. Edited by G. Asboe-Hansen. 1954. Pp. 321. Munksgaard, Copenhagen. (\$7.50; DAN. KR. 50.)

The connective tissues have been studied intensively in recent years by physicists, chemists, biologists, and pathologists. At the same time there has been a new interest in the rheumatic diseases, and the rheumatologist—although still mainly concerned with joint disease—is becoming increasingly a specialist in connective tissue disorders of all kinds. In the future someone may write a text-book of rheumatology in the widest sense, dealing with the subject in terms of connective tissue mechanisms, but the gap between the fundamental studies of connective tissue and the problems of disease in patients has not yet been bridged.

Great advances have been made in recent years. Connective tissue metabolism which was a closed book five years ago is now an established and rapidly expanding subject. New methods have been introduced for the isolation and characterization of connective tissue components and connective tissue changes are explored by histochemical techniques and biophysical analysis; but we are still at the stage of analysis and few attempts have been made to integrate new knowledge and to develop concepts that might be useful to the clinician. Those who hope to find such a synthesis in Dr. Hansen's work will be disappointed.

The present volume is not so much a book as a collection of independent reviews by accepted authorities. Thus, Karl Meyer presents his views on the chemistry of the ground substances and Dorfman gives us a very up-to-date review of the metabolism of mucopolysaccharides dealing fully with new work using C_{14} -labelled acetate. The really new piece of information is that on the basis of these studies hyaluronic acid appears to have a metabolic half-life of only two days. The histochemistry of connective tissue is reviewed by McManus and spreading is discussed by Duran-Reynals. As one would expect from the editor's interest, polysaccharides and mast cells are fully dealt with; but the chapter on collagen is very sketchy and elastin receives little consideration. There are also reviews dealing with ageing, wound healing, and the influence of hormones on connective tissue, and there is an account by Rinehart of the arteriosclerotic changes produced in monkeys by pyridoxine deficiency. Many of these reviews are clearly intended for the specialist and are a useful source of up-to-date information. On the other hand, the vast subject of arthritis has been dismissed in nine pages, and dermatology and ophthalmology receive similar treatment, so that these clinical chapters are really only of interest to non-medical readers. There is a good opening chapter by Robb-Smith on morphogenesis and there are many other excellent contributions. We should be grateful to Dr. Asboe-Hansen for collecting so many useful reviews into one volume, but not all the reviews are of equal quality, some references are inaccurate, and the volume sent for review contains four doubly printed pages which are quite illegible.

Perhaps the time is not yet ripe for a clear and integrated account of the connective tissue in health and disease.

J. H. KELLGREN.