Back” (which, as he so rightly says, commonly occurs in the inadequate individual) but the essay is superficial and rather sketchy. It should have been twice as long as it is to let the author develop his opinions for our benefit. The same sketchiness is strikingly illustrated by a contribution with the inviting title of “The Industrial Back—A Clinical Study”, in which a general review of the problem and accounts of the mechanism of back injury, of “anatomic diagnosis”, “roentgenograms”, examination and treatment occupy only three pages.

The second section deals with advanced orthopaedic problems in a stimulating and interesting manner. Its contents are, however, well outside the field of industry.

It is only fair to say that though this issue has much for the orthopaedic surgeon and little for the industrial medical officer, the proposed twelfth issue in this series, which promises to deal with rehabilitation, may well be of interest and importance in industry.

D. LL. GRIFFITHS


This dictionary was first published in three volumes between October, 1934, and December, 1937, and has an established place in the libraries of chemistry departments. The new edition has been completely revised and brought up to date to the end of 1950 (and results quoted till early 1953) by a number of distinguished organic chemists, and is indeed a monumental work comprising 3,031 pages in all. Over 2,500 compounds appear for the first time as principal entries.

The constitution and physical and chemical properties of the principal carbon compounds and their derivatives, together with the relevant references to the literature, are concisely presented in alphabetical order, and all the data are readily accessible with abundant cross references. The Editors have set out to provide information on the many new organic compounds, both natural and synthetic, which have come into prominence in recent years as the result of the rapid expansion in all branches of chemistry and in the field of biochemistry. Data on each compound include its sources, physical properties, chemical properties (typical reactions, analytical tests) with derivatives described under separate sub-headings.

In regard to its use by workers in the field of industrial medicine and toxicology, two minor aspects of presentation may appear confusing. The continual employment of the letters d and l to designate optically active compounds, rather than the modern connotations D, L, +, −, could cause confusion in the minds of readers not familiar with isomers of sugars and amino-acids. Also, where a number of isomers obtain for one molecular formula, the first member only is described. This leaves gaps in information on compounds of biochemical interest, e.g., porphyrins, haems, and bile pigments, for which knowledge of isomer type has important implications in the industrial medical field.

These minor criticisms apart, it is obvious that this dictionary represents a successful up-to-date attempt to cover in reasonable compass the whole field of carbon compounds. As such it will be invaluable to libraries of chemistry departments and research institutions to provide a repository of fundamental knowledge available not only to chemists but to specialists in such other fields as industrial medicine.

J. E. KENCH


Since its introduction in 1948 this book has come to be accepted as the standard work on rheumatic disease in this country and has earned world-wide recognition. Though it is only seven years since the appearance of the first edition, the introduction of steroid therapy just after the initial publication has necessitated much rewriting and some rearrangement of the earlier chapters.

A new chapter on the adrenal hormones has been added, and this gives a short but useful review of this side of the problem. Much information on the use of cortisone and A.C.T.H. has also been included in the chapters on rheumatic fever, rheumatoid arthritis, gout, and other rheumatic diseases. Two chapters on pain have been merged and form a most useful introduction to the problems of skeletal symptomatology as well as a valuable source of reference to the segmental distribution of deep pain. In the chapter on the rheumatic fever both the old salicylate and the newer hormone methods of treatment are critically considered, and indeed throughout the book a cautious attitude is adopted towards the new methods of treatment and affords a valuable corrective to current enthusiasm.

In the treatment of rheumatoid arthritis the importance of general and local rest to joints combined with maintenance of muscular power and optimal joint posture is rightly stressed. It may be questioned whether the advice to withhold chrysanthemum in the first few months of treatment is altogether in the best interests of the patient as it is in this stage that adequate suppression of the process would appear most likely to be beneficial. No reason is given for recommending the relatively toxic aqueous solution of sodium aurothiomaleate, and the question of high or low dosage of gold is not discussed, only low doses being recommended. The value of other methods of treatment is critically reviewed and a well balanced account of the treatment of rheumatoid arthritis is provided.

There is a useful chapter on the rarer arthritic syndromes which will delight the collector of eponyms, and there are excellent short chapters on radiology and radiotherapy. The chapters on physiotherapy give a useful account of the methods in current use and at the same time avoid the excessive claims sometimes made for this type of treatment.

Rheumatism in industry is considered very briefly. Following a discussion of the toll of rheumatism as a whole in the employed population, reference is made to the high prevalence rate in certain specific occupations—steel, mining, and transport. The importance of cooperation between industrial medical officers, employers,
and production managers to ensure that mechanization reduces and does not increase the rheumatic hazards is stressed, though it is admitted that much more research into the influence of occupation is required if effective steps are to be taken. Unfortunately, intervertebral disc degeneration, which forms such an important part of the rheumatic hazard, particularly in heavy industry, is not very fully discussed in any part of the book. Its importance has, however, been recognized only comparatively recently and it will, no doubt, receive greater prominence in future editions.

As inevitably happens in a book by many contributors of varying disciplines, there is not only much repetition but also some disagreement, particularly on the treatment which may be pursued. This, however, is not altogether a disadvantage in the present state of our knowledge.

The chapter on the prevalence of the rheumatic diseases is valuable but tends rather to neglect recent work. As in the first edition the illustrations and radiographs are beyond reproach, and this book can be confidently recommended to the industrial medical officer who requires an authoritative guide to present-day knowledge of the rheumatic diseases.

J. S. LAWRENCE


The first edition of Dr. Leslie Harris's book appeared in 1935 and contained a survey of the progress made in the study of vitamins to that date. It rapidly became accepted as a standard book on the subject, reaching the third edition before the second world war.

The period during and since the war saw great advances in this subject, many further substances and groups of substances being added to the list of vitamins, while knowledge of the accepted vitamins was greatly extended. The fourth edition has, in consequence, been enlarged and extensively rewritten to accommodate recent advances. Perhaps the most startling change is the rise (from six to 20) in the number of vitamins discussed.

Dr. Harris has three separate but closely intertwined stories to relate: first, the initial experimental work involved in the recognition of certain diseases as being due to a dietary deficiency and of the discovery of the foods necessary to restore health; secondly, the large scale introduction of these foods or of vitamin-rich extracts to effect the eradication of the diseases in the areas affected; finally, the isolation, identification, and synthesis of each vitamin by the organic chemist, allowing some insight to be obtained into the mode of action of the vitamin in the body.

The author has treated this complex subject in a masterly fashion, including an immense amount of factual material in a lively narrative. Vitamins in Theory and Practice is eminently suitable for the non-specialist without being superficial. The industrial medical officer dealing with dietary problems in industry and with the special treatment of patients subjected to particular hazards, e.g., chlorinated hydrocarbons, T.N.T., etc., should find it particularly useful.

J. C. SMITH