

than might have been anticipated from their xerophytic structure and the extreme aridity of the environment.

The atmometric data are somewhat disappointing. It is clear that they require a scrutiny to which the author had not been able to subject them at the time of publication, and are not uniformly trustworthy. A "Fig. 8," representing some of the data graphically, is referred to on pp. 44 and 55, but is not to be found in the book. There are also a regrettable number of printers' errors which have escaped correction. For example, "casual" appears in two successive lines on p. 3, in one or other of which it should surely read "causal"; while two variants on "Matjesfontein" appear on pp. 68 and 71. The "typography" of a district is referred to on p. 69, "Protaceae" for "Proteaceae" on p. 110, and so on.

*Mechanical Refrigeration: being a Practical Introduction to the Study of Cold Storage, Ice-making, and other Purposes to which Refrigeration is being Applied.* By Hal Williams. New and enlarged edition. (The Specialists' Series.) Pp. x+501+6 plates. (London: Sir Isaac Pitman and Sons, Ltd., 1924.) 20s. net.

THE volume under review is a new edition of Mr. Hal Williams's well-known book on mechanical refrigeration, which has now been amplified and largely rewritten. It contains a useful summary of the present state of our knowledge of refrigeration in its broadest aspect, and, as it does not go unduly into minute detail of design and equipment, it will appeal to all interested in the vital problem of the conservation of the food supply of the nation.

The book is descriptive rather than theoretical in its treatment of the subject, and a valuable feature is the account given of recent applications of refrigeration to such industries as paraffin crystallisation, mine shaft freezing, and so on. Another noteworthy feature in the new edition is the attention given to the high-speed total enclosed compressor. This type of compressor is an important step in the development of refrigerating machinery which has been taking place in recent years.

The general lay-out of the book partakes more of the nature of a dictionary than a text-book, for each paragraph is sub-headed under such titles as "Unit of Pressure," "Liquid Coolers," "Buying Machinery." This facilitates the use of the volume as a work of reference. The illustrations are plentiful and include a number of folding plates, but it is questionable whether these justify their cost in a book of this character. The author has given a prominent place to one very important application of refrigeration, namely, the overseas transport of fruit, for this industry is destined to be a vital factor in the development of the British colonies.

E. G.

*A Catalogue of the recent Sea-Urchins (Echinoidea) in the Collection of the British Museum (Natural History).* By Hubert Lyman Clark. Pp. xxviii+250+12 plates. (London: British Museum (Natural History), 1925.) n.p.

DR. H. LYMAN CLARK, of the Museum of Comparative Zoology, Cambridge, Mass., who is one of the outstanding authorities on echinoderms, has given in this catalogue the results of his studies, extending over

some months in 1924, of the British Museum collection. This has been known as one of the important collections of sea-urchins since the time of J. E. Gray's first connexion with the Museum in 1824, in which year he published a paper—dealing with about 50 species—which may be regarded as the foundation for a catalogue. For thirty years Gray continued his study and, at intervals, his publications on sea-urchins. Since his time the collection has received notable additions from the expeditions of the *Challenger*, *Alert*, *Penguin*, and *Egeria*, from the collections made by Prof. A. Willey and Prof. J. Stanley Gardiner, and from those made during the recent British Antarctic Expeditions; it now ranks as one of the foremost collections of the world. It contains about 8000 specimens representing 382 species grouped in 146 genera, and Dr. Clark directs attention to the wealth of large examples in many of the series. He gives a table showing that in the collection is type material of 111 forms, 25 of which are new species or varieties described in this volume.

Dr. Clark has made available to students of the Echinoidea an accurate account of this great collection, and his catalogue serves also as a handbook for the identification of most sea-urchins. Twelve excellent collotype plates provide illustrations of the new species.

*Recent Advances in Medicine: Clinical, Laboratory, Therapeutic.* By Dr. G. E. Beaumont and E. C. Dodds. Pp. xii+292. (London: J. and A. Churchill, 1924.) 10s. 6d. net.

THE rapidity with which the study of medicine advances makes it necessary for the physician and clinical pathologist to keep constantly in touch with new methods of investigating and treating disease. With limited time and material for research, it is impossible for the busy practitioner to test these for himself, or to isolate from the vast accumulation of recent medical literature what is likely to be of practical value. In "Recent Advances in Medicine" a physician and a biochemist collaborate to give an account of the more important changes in clinical and laboratory routine methods of the last decade, and to indicate the relative value of the results obtained. The book covers a very wide field, including such subjects as blood analysis, renal, hepatic, and pancreatic functions, test meals, the polygraph and electrocardiograph, artificial pneumothorax, and various cutaneous and serological tests. Some of these might with advantage have received less attention; for example, the electrocardiograph and its tracings are of little value except to the specialist. X-ray investigation of the stomach, to which less than a page is devoted, is of far more interest to practitioner and student.

The book will be welcomed as a very useful addition to the practitioner's library. It contains numerous references and is excellently indexed.

*Conformal Representation.* By Leo Lewent. Translated by Dr. R. Jones and D. H. Williams. Pp. viii+146. (London: Methuen and Co., Ltd., 1925.) 7s. 6d. net.

THE work under notice is a translation of Dr. Leo Lewent's "Conforme Abbildung" (Teubner). It opens with an account of functions of a complex variable from the Cauchy-Riemann point of view. A long