The chapter on the colour of crinoids includes the stalked and sessile forms as well as the unstalked. The part ends with a section on the economic value of the recent crinoids; this is confined to their sale as curios, for, we are told, they serve no useful purpose; they are not even eaten by any animal that serves as human food. In this respect it is probable that the recent crinoids have acquired a securer footing than some of their large-bodied ancestors.

These two large books, though they contain only "introductory matter" to the systematic descriptions, already furnish a corpus of nearly every observation ever made on these beautiful creatures, and reference is facilitated by full tables of contents and indexes. Although a great deal of the work is based on Dr. Clark's own observations, especially concerning the skeletal and muscular anatomy, it does not profess to give new facts or original theories. That in no way lessens its great value to the worker, who will also find his wants attended to by various keys and by comparative diagrams. He will be grateful to Dr. Clark and will marvel at the energy and perseverance that have brought him so far along a laborious road.

F. A. B.

The Subject Index to Periodicals, 1917–1919. Issued by the Library Association. L: List of Periodicals Indexed and Author Index. Pp. ix+103. (London: Grafton and Co., 1924.) 215. net.

THE alphabetical index of names of authors of articles included in the various Subject Indexes to Periodicals issued by the Library Association for the period 1917– 1919 has now been published. The index contains more than 20,000 names of authors, with the sections of the Index and the headings under which the titles of their papers are registered. It is estimated that, on an average, each author has published two papers, so that the total number of papers indexed for 1917–19 will be about 40,000. Those who possess the valuable Subject Indexes already published will be able through this author index to find a paper when they have forgotten its title although they remember the author's name. The abbreviations for 477 periodicals used in preparing the indexes for 1917–19 are also given.

preparing the indexes for 1917–19 are also given. The headquarters of the "Subject Index to Periodicals" were transferred to the National Library of Wales, Aberystwyth, in January 1921. The access to periodicals in this Library has been of great assistance to the editors in preparing the indexes. The editors record the voluntary help they have had from some forty-eight libraries in Great Britain and from a number of private contributors. While expressing its grateful thanks to all who have helped in the undertaking since its beginning in 1915, the Library Association makes a strong appeal for assistance to those librarians who have hitherto held aloof from active co-operation in the work.

It is obvious that the value of the Index depends upon its completeness; although up to the present time some 575 periodicals have been examined, some of the libraries that have not yet taken part in the work may very well have on their shelves other periodicals containing relevant matter. We would urge any such libraries to consider whether they cannot arrange to assist in the future. Laboratory Experiments in Chemistry: to accompany Black and Conant's "Practical Chemistry." By N. Henry Black. Pp. x+167. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1923.) 55. net.

THE author of this small work can be congratulated upon having written a really practical text-book which is much superior to most of those now used in Great Britain. Its chief feature is absolute clarity of presentation; no pupil should go wrong if he follows faithfully the directions given, and if he tries to answer the numerous questions interpolated throughout the text he will exercise his intelligence as well as his fingers and his capacity for obeying instructions. Those who prefer the strictly heuristic method of teaching will probably not regard with favour a book of this kind, but they would find it very useful if-as is usually the case—they are expected to cover a lot of ground with a large class in a limited time. Other valuable features are the optional work given after each experiment, and, near the end of the course, some elementary lessons in applied chemistry. The present writer has given some of these experiments to his pupils and can testify to their value, not only in imparting knowledge but also in stimulating interest. Some minor points of criticism will doubtless suggest themselves to every teacher, but these are negligible in comparison with the excellence of the work as a whole. Unconscious humour, too, is not often to be found in a school textbook, but if the reader will refer to the second sentence on page 1 of this book and then glance at the illustrations on the frontispiece opposite, he will learn that the homely test-tube, beaker, crucible, etc., are among the "less familiar" pieces of apparatus. We wonder what are the more familiar pieces of apparatus in American schools ?

Principles of Electric Motors and Control. By Gordon Fox. Pp. xiv+499. (London : McGraw-Hill Publishing Co., Ltd., 1924.) 17s. 6d. net.

Most books describing electric motors and controllers are written mainly from the point of view of the designer, that is, from the point of view of the manufacturer. The number of operating engineers, however, is much larger than the number of designers, and faulty application, as the author points out, can nullify good design. This book is intended for students and for those interested in the selection, application, purchase, and sale of electric motors and controllers. The discussions are simple and practical and will be easily understood by the engineer. Although many graphs are given, vector diagrams and higher mathematics have been rigorously excluded. The control diagrams all conform to standard American practice, but the practice in Great Britain is much the same. A very full bibliography is given.

The book will be found helpful both to the practical and theoretical electrical engineer. The latter will find in it diagrams which illustrate excellently practical applications of known theoretical principles with which he is familiar. For example, a clear diagram is given of the principal connexions for converting from one system of supply to another of different frequency at constant power.

NO. 2862, VOL. 114]