be foolish, if not impracticable, to attempt to produce a volume indexing all that is published in 1932 and nothing published in previous years. Indeed, this volume will be found to refer to many articles which came out in 1931.

The volume contains entries of nearly 26,000 articles selected from 550 English and American, 21 French, Belgian and Swiss, 19 German and 2 Italian periodicals. Periodicals covered by certain named publications such as Science Abstracts, Index Medicus, Engineering Index and Photographic Abstracts are not indexed.

Workers in all branches of science will find this index most useful as a means of ascertaining what has been published in a given subject in the less-known periodicals. Volumes, similar to the present, have now been published for the years 1926 up to the present time. We hope the series will be continued.

What Butterfly is That? a Guide to the Butterflies of Australia. By Dr. G. A. Waterhouse. Pp. viii +291+34 plates. (Sydney: Angus and Robertson, Ltd.; London: The Australian Book Co., 1932.) 12s. 6d. net.

The object of this book is to provide a popular guide to the butterflies of Australia. It is gratifying to find such an object attained with due regard to the scientific requirements of the subject and without sacrifice of accuracy. It describes every known species of Australian butterfly and most of them are figured (on a somewhat reduced scale) on the really excellent coloured plates that are appended. The descriptions err possibly on the side of brevity but they are intended to be used in conjunction with the plates. Short diagnoses of the larvæ and pupæ are included, so far as they are known, and many of such stages are extremely well figured in a series of half-tone plates. The book is quite a model of its kind and a great deal of information is compressed within its pages. It deserves wide circulation and is exceptional value for its modest price.

Amateur Telescope Making. Albert G. Ingalls, Editor. With Contributions by Russell W. Porter, Prof. Charles S. Hastings, Rev. William F. A. Ellison, Dr. George Ellery Hale, Clarendon Ions, John M. Pierce, A. W. Everest, John H. Hindle, Rev. Harold Nelson Cutler, Franklin B. Wright, Alan R. Kirkham, F. J. Sellers. Third edition completely revised and enlarged. Pp. xii +500. (New York: Scientific American Publishing Co., 1933.) 3 dollars.

This book is a mine of practical information on the arts of making, testing and adjusting telescopes. It is a composite work and, consequently, it lacks continuity. But if the reader, who is ambitious of constructing his own instrument and enjoying the fruits of his labours, will take the necessary trouble, he will easily pick out the parts applicable to his own particular needs and problems. The earlier editions have evidently

encouraged a large number of amateurs to make their own telescopes, and for those who are interested in this fascinating hobby the book can be unreservedly recommended.

Gesteinsanalytisches Praktikum. Von Prof. Dr. E. Dittler. Mit einem Anhang: Kontrolle und graphische Darstellung der Gesteinsanalysen, von Dr. A. Kohler. Pp. viii+112. (Berlin und Leipzig: Walter de Gruyter und Co., 1933.) 4 gold marks.

THE present work deals with the quantitative analysis of rocks, mainly silicate rocks. The practical directions are clearly and systematically given, and less common elements which may be present are taken into account. Fluorine and boric acid are also included. The determination of the total rare earths forms part of the scheme, but the separation or individual determination is omitted.

The last part of the book deals very fully with the calculations and analytical control, in which the distribution of acidic and basic oxides to various mineral constituents is considered, including such graphical methods as Marchet's felspar triangle.

Qualitative Analysis. By H. S. Moodey. Pp. ix +182. (London: William Heinemann, Ltd., 1933.) 5s.

This book begins with an account of the elementary conceptions of physical chemistry which are necessary in understanding analytical operations. This part, which occupies one-third of the book, is not characterised by any very novel features and is contained in most textbooks which would presumably be used along with a laboratory manual.

The rest of the book deals with qualitative analysis, including tables of group separations, but not including the collected tests for individual radicals usually provided in books on qualitative analysis. This appears to be a defect. The instructions for the separations in the groups, on the other hand, are very complete. The book will probably be found more useful in schools than in university or analytical laboratories.

Diptera of Patagonia and South Chile: based mainly on Material in the British Museum (Natural History). Part 4: Empididæ. By J. E. Collin. Pp. viii +334. (London: British Museum (Natural History), 1933.) n.p.

The British Museum (Natural History) has recently issued a further part of the series "Diptera of Patagonia and South Chile" which has often been noticed in these columns. The latest contribution to the series is by Mr. J. E. Collin and deals with the family Empididæ. This group is apparently richly developed in the regions in question, since 198 of the species described were previously unknown. The part forms a volume of more than 300 pp. with many text-figures and is well produced in a manner similar to its predecessors.