they are an educative study of great importance such as we trust we may one day see in the British Museum. The collection of species is valuable, but the undue accumulation of skins and dried bones, useful enough for the study of variation and evolution, may be carried too far in museums, which, if intended for the public, should exist as backgrounds for the study of animals in wild Nature, their adaptation and fitting in to their natural environments. The world requires the widest range of interests, and millions to-day have learnt to love Nature. The museum which stands still and does not recognise this is doomed, while the one that evolves with the advances of the times will surely not lack the necessary support.

Short Notices

An Elementary Treatise on Pure Mathematics. By N. R. Culmore Dockeray. (Bell's Mathematical Series.) Pp. xiv + 566. (London : G. Bell and Sons, Ltd., 1934.) 16s. net.

THE development of modern geometry from its fundamental Euclidean basis marked the beginning of a new epoch in the teaching of school mathematics, for it led slowly to the removal of those artificial divisions which formerly encompassed arithmetic, algebra and geometry. Such a natural process, however, was not destined to stop at these subjects, and, in these days of advanced courses and scholarship classes, it is gradually, though surely, permeating analysis, which has too long regarded algebra, trigonometry and the calculus as distinct parts.

In the volume under review, a very welcome attempt has been made to sweep away these divisions, and analysis is here treated as a unified whole. A large part of the text has necessarily been devoted to the never ending subject of convergence, which is fundamental to the rigour demanded by modern mathematics. Limits, continuity and differentiation are dealt with quite early, and are followed by an interesting and exhaustive chapter on the exponential theorem and the logarithmic series. Next comes more convergence of series, this time, of complex terms, out of which is logically developed the expansions of the circular functions, both in series and in products. Chap. xi is devoted to a lucid discussion of Taylor's theorem, which is followed by a very practical chapter on the applications of the calculus to curves and curve-tracing. The treatment here is much fuller than usual and deals with the real difficulties that often confront a student. The book closes with more convergence and the expansions of trigonometrical functions as infinite products.

As the book has been written essentially for scholarship candidates and first year university students, no attempt has been made to treat analysis as a rational development of the continuum of real numbers, and the omission to deal with irrational numbers is due to the fact that this part of the subject has already been treated so well by G. H. Hardy in his "Pure Mathematics".

One wonders whether the course is not a little overbalanced on the side of theoretical convergence, in spite of its fundamental importance.

The text is clearly written and well printed, and a large number of exercises provided for practice. These are stated to be fairly simple, but whether the student will think so is another matter, although in some cases valuable hints for solution are given.

Teachers should welcome such an admirable textbook as this, for it is undoubtedly a real contribution to school mathematics.   F. G. W. B.

Das Tierreich : eine Zusammenstellung und Kennzeichnung der rezenten Tierformen. Gegründet von der Deutschen Zoologischen Gesellschaft. Im Auftrage der Preussischen Akademie der Wissenschaften zu Berlin. Herausgegeben von F. E. Schulze und W. Kükenthal, fortgesetzt von K. Heider, seit 1927 von R. Hesse. (1) Lief. 57 : *Pseudoscorpionidea I., Subord. Chthoniinea et Neobisiinea.* Bearbeitet von Dr. Max Beier. Pp. xx + 258. 40 gold marks. (2) Lief. 58 : *Pseudoscorpionidea II., Subord. C. Cheliferinea.* Bearbeitet von Dr. Max Beier. Pp. xxi + 294. 48·75 gold marks. (3) Lief. 60 : *Acarina ; Tydeidae, Ereynetidae.* Bearbeitet von Dr. Sig Thor. Pp. xi + 84. 12 gold marks. (Berlin und Leipzig : Walter de Gruyter und Co., 1932–1933.)

(1 and 2) THE sharply delimited group of false scorpions, which includes small tracheate arachnids 1–6 mm. in length, has attracted a considerable number of students, and the known species now number approximately 800, which are referred in this work to about 160 genera and 14 families. Dr. Beier gives a detailed account (19 pp.) of the external features of the order and a brief summary of the biology. He then subdivides the order into the three sub-orders noted in the title, the constituent families, genera and species of which are carefully defined and their discrimination aided by keys. 571 line drawings of diagnostic features are added, and the whole forms a critical and competent systematic survey.

(3) This part deals with two families of primitive, prostigmatic, terrestrial mites from a tenth to a third (rarely a half) of a millimetre in length, our knowledge of which has been built up chiefly during the last thirty or forty years. The earliest notice of the Ereynetidae was that by Réaumur, who in 1710 recorded and figured their occurrence on the region of the pulmonary opening of *Helix pomatia* and in the terrestrial streptoneuran *Ericia (Cyclostoma) elegans*, and added drawings of the dorsal and ventral aspects of this "insecte des limaçons" now known as *Riccardoella limacum*. Dr. Sig Thor has dealt skilfully with these difficult families, in which he recognises 17 genera and about 85 valid species, the systematic characters of which are shown in 102 figures.