

arranged, and many fully worked out in two or more ways. With this short analysis of the contents, we heartily commend the work to teachers generally, assuming, of course, that they will regulate their use of it in proportion to the requirements of age and ability of their pupils. The work is neatly got up, and we have detected hardly any errata. On page 51, ex. 2, we have "How many petals are there in 376 forget-me-nots?" Here there is an omission and a slight technical error. In botanical language the "forget-me-not" (*Myosotis*) is monopetalous, the number of lobes of the corolla being five.

R. T.

Transactions of the Woolhope Naturalists' Field Club for 1869.

No slight service has been rendered to the cause of natural science by the numerous naturalists' field clubs scattered here and there through the country, not only in the exploration of the natural products of their respective districts during their summer excursions, but in infusing a love of such pursuits among dwellers in the country. When the transactions of the year are published in so attractive a form as the volume before us, an additional benefit is conferred. The Woolhope Club is one which has been for some years favourably known, chiefly through the labours of one or two genuine naturalists among its members, as having furnished some real contributions to science by its researches among the pleasant woodland county of Herefordshire. The volume consists mainly of lively accounts of the various excursions made by the club during the summer of 1869, with lists of the rarities, zoological and botanical, met with, and reports of the papers read by its members. Among the more important of the latter we may mention Dr. Bull's history of "The Ancient Forest of Deerfold;" and papers on the occurrence and identification of rare birds in Herefordshire and Radnorshire, by Mr. Armitage, Rev. Clement Ley, and Mr. James W. Lloyd, including the peregrine falcon (*Falco peregrinus*), the hobby (*F. subbuteo*), the little merlin (*F. axalon*), the grasshopper warbler (*Sylvia locustella*), the fire-crested wren (*Regulus ignicapillus*), and the great and little bittern (*Ardea stellaris* and *minuta*). Dr. Bull has given a celebrity to the Woolhope Club for its enthusiasm in favour of edible fungi; there are several papers on the subject, to which is appended Mr. W. G. Smith's *Clavis Agaricinorum*. Several very pretty illustrations ornament the book, among which may be mentioned photographs of some of the remarkable trees of Herefordshire, and a drawing of the famous Deerfold mistletoe-oak.

Contributions to Botany, Iconographic and Descriptive.

By John Miers, F.R.S., F.L.S. Vol. II. (Williams and Norgate, 1869.)

THIS volume will be welcomed as an addition to Mr. Miers' contributions to systematic and structural botany, all of which possess the value of the labours of a careful and accurate observer, and one especially conversant practically with South American botany. We find in this volume carefully worked papers on the *Calyceaceæ*, a small order closely allied to *Compositæ*, on the carpological structure of *Bignoniaceæ*, on the history of the maté plant, and the different species of ilex used in the preparation of Paraguay tea, a monograph of the *Tricuspidariæ*, an essay on the genus *Goupia*, one on the structure of *Heliotropiaceæ*, and a paper on the South American forms of *Ehretiaceæ*. But the most important article is one on the genus *Ephedra*, which Mr. Miers considers has been improperly placed among gymnosperms, maintaining that it has neither naked ovules nor naked seeds, and believing that it is more allied to *Urticaceæ* than to *Cycadaceæ* or *Conifera*, presenting a far higher order of structure than these latter orders. The third volume, devoted entirely to *Menispermaceæ*, is promised shortly.

A. W. B.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his Correspondents. No notice is taken of anonymous communications.]

Life in the Deep Sea

THE interest which attaches to every fact which bears upon the phenomena of life at great depths in the ocean, will, I hope, excuse me for especially directing the attention of the readers of NATURE to the "Beiträge zur Plastiden Theorie" (published in the fifth volume of the *Jenaische Zeitschrift*), with a separate copy of which my friend Prof. Haeckel has just favoured me.

The longest of the papers which constitute the "Beiträge," is devoted to a careful study of *Bathybius*, and the associated Cocoliths and Cocospheres; and it is a matter of great satisfaction to me that Prof. Haeckel has arrived at conclusions which, in all the main points, agree with my own respecting these remarkable organisms.

In a second paper Prof. Haeckel describes a wonderful Radiolarian, *Myxobrachia*, observed during his stay at the Canary Islands, the further study of which promises to throw a new light upon the nature of the Cocoliths and Cocospheres; inasmuch as bodies of the same character were found accumulated, and apparently developed, in masses at the extremities of certain prolongations of the protoplasm of *Myxobrachia*. As *Myxobrachia* attains a length of half an inch, and seems to be abundant in the harbour of Lanzerote, it is to be hoped that Prof. Haeckel, and other naturalists, will not long remain deprived of the opportunity of submitting it to re-examination.

Another important discovery made public in the "Beiträge," is the existence of starch in the well-known "yellow cells" of the *Radiolaria*. In connection with this fact, it is interesting to remark that all the *Radiolaria* are floating organisms, and, consequently, that they are fully exposed to the light of the sun.

T. H. HUXLEY

Jermyn Street, June 23

The "English Cyclopædia"

YOUR issue of June 2 contains a long letter from "Nemo," to which a short reply seems desirable. Most of his statements are incorrect, and, as an illustration of the trustworthiness of his facts, or supposed facts, allusion may be made to his remark that all he can find in the Cyclopædia about *Arvicola*, *Crocidura*, *Crossopi*, *Hypudæi*, and *Sorices* is that *Hypudæus* is sometimes spelt *Hizudæus*; whereas all the species mentioned in the Close Time Report to which he refers are described or noticed in the Cyclopædia. The species of the sub-genera *Crocidura* and *Crossopus* are referred to under their generic heading *Sorex* in the article *Sorecidae*, E. C. Some of the terms which he says are omitted properly belong to another division of the Cyclopædia. Thus *Acclimatisation* is noticed in the Arts and Sciences division, and something additional will probably be given in the supplement to that division. Again, *Deep Sea Dredging* had scarcely become a subject of general interest when the Natural History Supplement was being written, while the character of the principal results, and the probability of great additions to the subject, rendered it advisable, as was thought, to postpone its consideration until the Arts and Sciences division was supplemented. Some of the results are, however, given under *Alcyonaria* and elsewhere in the Natural History Supplement. As regards the other subjects said to be omitted, most of them do occur. *Darwinism* is noticed under *Species*, E. C. S., and also under *Palæontology*, *Crustacea*, &c. *Dimorphism in Animals* will be found under *Annelida*, *Hydrozoa*, *Generations (Alternation of)*, *Crustacea*, &c., in E. C. S. *Eophyton* is noticed; and *Eozoon* is repeatedly mentioned, while its systematic position is described under *Foraminifera*. The article *Entophyta* in E. C. is devoted to the fungi connected with skin diseases, while those which are associated with ague and other diseases would be most appropriately noticed in connection with those diseases, which do not belong to the Natural History division. A whole column is given to *Hyalonema* under *Alcyonaria*, E. C. S., in which the contradictory views of Drs. Bowerbank, Gray, Wright, and others, are distinctly referred to. Something is said about *Hybridity* under *Primula*. *Ornithoscelida* is not in; the term was first proposed in a paper read Nov. 24, 1869, which paper was not published in the printed form until after the Sup-