

and examination questions. Short summaries and experiments for demonstration are sometimes appended, and the time required for each exercise is also given. This should be very helpful to the teacher in organising his practical classes. In the section on chemical theory, the combination of the two equations representing the effects of pressure and temperature on the volume of a gas (p. 137) may cause some difficulty, and the reason for introducing the idea of 'molecules' is not quite clear; otherwise the reasoning which leads up to the determination of atomic weights seems to have been admirably condensed.

The chapter on double decomposition opens well with the statement that acids, alkalis, and salts are all polar compounds, and a hint is given that two types of union may be involved in compounds like copper sulphate and that these two types are due to the sharing of electrons and to electrical attraction respectively. Nevertheless, the chapter on valency is disappointing, no attempt being made to use the terms electrovalence and covalence. Electrolysis and qualitative analysis are also dealt with in an elementary way, but the ionic hypothesis is not used. In the chapter on acidimetry the advantage of calculating the normalities of solutions is clearly explained.

*Haliotis*. By Doris R. Crofts. (Liverpool Marine Biology Committee: L. M. B. C. Memoirs on Typical British Marine Plants and Animals, 29.) Pp. viii + 174 + 8 plates. (Liverpool: University Press of Liverpool; London: Hodder and Stoughton, Ltd., 1929.) 10s. 6d.

THE L.M.B.C. Memoirs are indispensable 'apparatus' in all zoological laboratories, and especially is this true of the little monographs on the Mollusca. All teachers know the difficulty of describing to a class the intricate peculiarities of molluscan structure, and it is not until the student sits down with scalpel and forceps to unravel for himself the intertwined parts that he begins to appreciate their relations.

Miss Crofts' volume on *Haliotis* is a valuable addition to the series, for this animal is "the only primitive British gastropod which is large enough for satisfactory dissection", and its general anatomy has never before been given completely by any one author. Clear directions for dissection are set forth; and, in addition to the plates, there are many text-figures that help to elucidate puzzling features in the anatomy. There are some interesting new biological notes, and the author strongly recommends the formation of permanent reservation areas off Guernsey to make good the serious depletion of the crop of 'ormers' that two years' suspension of the fishery there has only partially stayed.

D. L. M.

*Practical Criticism: a Study of Literary Judgment*. By I. A. Richards. Pp. xiii + 375. (London: Kegan Paul and Co., Ltd., 1929.) 12s. 6d. net.

THIS book has attracted much attention in literary circles, but it deserves notice here also, because it is a good example of the present tendency to bridge

the old gulf between the study of the humanities and the study of science. Mr. Richards points out that there are subjects which can be discussed in terms of verifiable facts and precise hypotheses. These are the subjects called the sciences. There are other subjects, such as the concrete affairs of organisation and administration, which can be handled by rules of thumb and accepted conventions. Between these two come ethics, metaphysics, theology, aesthetics, and so forth; the sphere of "random beliefs and hopeful guesses".

Mr. Richards takes one of these fields of warm disputation, that of literary criticism, and makes it the subject of as scientific an inquiry as the nature of the case permits. By an interesting expedient, devised in the course of teaching duties, he got a large number of people, similar as to age and general culture, to pass unbiased judgments upon certain selected poems of unrevealed authorship. The results seem to have surprised even Mr. Richards, for the same poem was described in terms ranging between "this is a fine poem" and "this is absolute tripe". Here, then, is the problem. Can nothing be done to improve the technique of criticism? The familiar watchwords of the great critics do not help much, because they are only pointers which may lead different minds to widely different conclusions. Mr. Richards ends his fascinating inquiry by a warning against the abuse of psychology, and some suggestions towards clearing away the fogs of criticism. The better teaching of English is, he thinks, the chief hope.

*A Countryman's Day Book: an Anthology of Countryside Lore*. Compiled and arranged by C. N. French. Pp. xxvi + 254. (London and Toronto: J. M. Dent and Sons, Ltd., 1929.) 6s. net.

THIS collection of weather 'saws' and countryside lore will interest and amuse many people of very varied interests. Meteorologists, farmers, gardeners, and many others will find in the quotations from old anthologies and in the popular sayings a modicum of truth, but such a preponderance of error as to cause wonder regarding the origin of most of these popular beliefs of bygone times. As the title indicates, a set of 'saws' and quotations is given for each day of the year. The book is dedicated to cottage gardeners, and contains a number of quaint illustrations copied from ancient sources.

*La vie du globe et la science moderne*. Par Prof. L. Houlléviq. Pp. xi + 244. (Paris: Armand Colin, 1929.) 14 francs.

IN a number of short essays, the author of this little volume has succeeded in giving a general account of modern ideas bearing on the physics of the globe. There is no attempt at detailed treatment, for the book is written for the general reader and not the specialist, but Prof. Houlléviq has chosen his matter well and has a faculty of lucid exposition without the waste of words. His book should prove of interest to workers in other branches of science who care to know the trend of thought in terrestrial physics.