

Shell Life: an Introduction to the British Mollusca. By E. Step, F.L.S., &c. "Library of Natural History Romance." Pp. 414, 32 Plates, Figs. in text. (London: F. Warne and Co., 1901.) Price 6s.

COULD paper, print and pictures make a meritorious book, this would be one. The paper is of superior quality, and the print is exceptionally clear and clean; whilst the illustrations, although drawn from many sources, good, bad and indifferent, are well printed.

The thirty-two photo-process plates are excellent of their kind, their only fault consisting in the want of arrangement in their component items and the inclusion of some objects far too minute for this method of illustration. Unfortunately there is no reference to them in the text, and the names cited on the plates do not always coincide with those given in the text.

The figures in the text are some of them very old friends, and saw service in the Rev. J. G. Wood's "Common Shells of the Sea-shore"; others are of later date and foreign extraction. Nor must we omit a word of praise for the binding and the tasteful and quaint, if not entirely appropriate, design on the cover.

It is a matter for regret, however, that the author did not make himself more familiar with his subject so that his work might have been something better than the mere outcome of industrious compilation from authorities more or less ancient. Thus he instances the patelliform as the primitive type of the molluscan shell; he is unaware of the existence of a rudimentary heart in Dentalium, and gives renewed currency to the blunder (founded originally on a mistranslation) that its embryo shell is bivalve; and so on, and so on.

In the matter of classification our author follows that of the Cambridge Natural History, which, having already been dealt with in these pages (vol. lii. p. 150), need not be further commented on here; nor shall words be wasted on the nomenclature employed, which is hopelessly out of date.

In the endeavour to confine scientific names entirely within brackets and furnish "popular" names where none such exist, the author is driven to translations, some of which recall those that once figured on the fossil fish tablets in the British Museum. As a rule derivations of names are, perhaps wisely, avoided; but we do meet with "Aplysia (from *a* and *plus*, unwashable)."

On the whole we incline to the opinion that the publishers did well to include this book in their "Library of Natural History Romance." (BV)².

Arithmetic. By R. Hargreaves, M.A. Pp. viii + 416. (Oxford: Clarendon Press, 1901.) Price 4s. 6d.

IT is very difficult for an author to produce anything strikingly new in such a well-worn subject as arithmetic, and consequently this treatise greatly resembles two or three others of the most meritorious character. A good feature of the work is the attention which it devotes to the *theory* of arithmetic. Labour-saving processes, when long multiplications have to be performed and one of the factors possesses some particular simplicity of form, are frequently given—to the interest as well as to the advantage of the pupil.

If only our terrible system of weights and measures were replaced by the metric system, what a load of revolting and time-wasting work would be removed from the path of the English pupil! A short account of this system will be found in the present work.

Perhaps the explanation of the properties of recurring decimals is scarcely so complete and systematic as it might be. Here the use of a little algebra would do a great deal towards promoting in the mind of the pupil an understanding of the various rules for treating these decimals; and there seems to be no valid reason against

the employment of algebra for such a purpose. Purely arithmetical proofs necessarily fail in generality.

There is a good section on approximative work which will be a great help to the learner. There are also sections on the square and cube root; but, with a logarithm book in our hands, the utility of arithmetical or algebraical processes for finding a cube root is more than doubtful.

The work abounds with examples, and with good hints to the pupil for shortening calculation and for choosing one mode of procedure in preference to another when two or more ways of doing a thing present themselves.

Intermediate Practical Physics. By J. B. Wilkinson. Pp. x + 154. (London: Chapman and Hall, Ltd., 1902.) Price 2s. 6d.

THIS book is for the intermediate and preliminary scientific examinations of the London University, and deals with experiments of a very simple kind. The exercises illustrate the various branches of physics, and they seem to be very suitable for beginners; but we regret that in many cases the descriptions are not accurate. Thus, in describing the measurement of the diameter of a sphere by placing it between two squared blocks, we are told to test the right-angles of the blocks by seeing whether they fit when placed on the table and then turning both blocks over. Surely this is no test. A little further on, in the account of the siphon barometer, the correction for change in density of the mercury and the expansion of the glass scale is attempted, but sadly needs revision and rearrangement. We should also like to know why the corrections for temperature are given with the siphon barometer and not with Fortin's pattern, where they must be equally important. Although many other points in the book require some correction, we think it is written on the right lines, as it aims at simplicity.

S. S.

Flowers of the Field. By the late Rev. C. A. Johns. 29th edition. Entirely rewritten and revised by G. S. Boulger, B.A., F.L.S., F.G.S., Professor of Botany in the City of London College. Pp. xlii + 926. (London: Society for Promoting Christian Knowledge, 1899.)

THE fact that this work should have passed through so many editions sufficiently proves its popularity. The present volume is an improvement on its predecessors, both by reason of the inclusion of new and valuable matter and by the excision of some that could be very well spared. The more definite and full descriptions of the species should aid in the identification of our British plants, but the illustrations still are capable of improvement. The book is, however, sure of a wide circulation amongst the large number of people who take an interest in, and desire a closer acquaintance with, the wild flowers of the country.

Correlation Tables of British Strata. By Bernard Hobson, M.Sc., F.G.S. (London: Dulau and Co., 1901.) Price 5s.

A SHORT time ago (NATURE, April 11) attention was called to the publication of Woodward's "Table of British Strata," also issued by Messrs. Dulau and Co. The present work is in some respects far more elaborate, as it comprises nineteen detailed tables ranging from Archæan to Pleistocene. The plan of the compiler is to give the subdivisions of each formation as determined in different regions in Great Britain and Ireland. Thus, to take the Cambrian, there are columns for North Wales, South Wales, Malvern Hills, Wrekin area, Nuneaton, North-west Scotland, and Ireland; and in these columns the various local divisions and their estimated thicknesses are given, together with references to original sources of information. No attempt is made to enumerate the