We avail ourselves of the opportunity of noticing this book, because, while it is intended to circulate chiefly amongst gardeners, both professional and amateur, it seeks to convey such information on the real value of the plants, which, we think, should in all cases be a point in a gardener's education. J. R. J.

A Cyclopædia of Quantitative Chemical Analysis. By Frank H. Storer, A.M., Professor of General and Analytical Chemistry in the Massachussetts Institute of Technology. Part I., pp. 112. (Boston and Cambridge: Lever, Francis, and Co. London: E. and F. N. Spon, Charing Cross, 1870).

THIS book is a compilation of all the known methods of quantitative analysis. The processes and necessary apparatus are minutely detailed, the descriptions being reproduced from the various handbooks of chemistry and from the original memoirs. The labour entailed by such a work must necessarily have been very great, and its value is much increased by the numerous references to the original descriptions of the processes. This part extends as far as the article on carbonate of silver, from which some notion of the extent of the whole work may be obtained. The principles on which the analytical methods depend are shortly stated in each article, and under these headings are described the methods employed, and the precautions to be observed, the whole being arranged in separate paragraphs for facility of reference. This work promises to be very useful as a book of reference, and will enable the analyst to select without much labour the process most suitable to the work in which he is engaged. We recommend this book to the attention of analytical chemists, being convinced that it will be found to contain much valuable information in a very convenient form.

A Series of Chemical Problems for Use in Colleges and Schools, adapted for the Preparation of Students for the Government Science and Society of Arts' Examinations. By T. E. Thorpe, Ph.D., Professor of Chemistry in Anderson's University, Glasgow. With a Preface by Prof. Roscoe. Pp. 67. (London: Macmillan and Co.; Manchester: J. Galt and Co., 1870.)

THIS little book contains a number of useful tables and descriptions of the modes of calculation made use of in chemical science, illustrated by examples. Each section is followed by a series of questions, for the most part original, but some of which are selected from the examination papers of the Science and Art department and from the Owens College calendar. The subjects treated are Weights and Measures, Thermometric Scales, Correction of Volumes of Gases, Specific Gravity, Percentage Composition, Quantities of Reagents necessary to form certain Products, Combination and Decomposition of Gaseous Bodies, Determination of Atomic Weights, Calculation of Empirical Formulæ, and of the Results of Analysis, Specific Heat, Latent Heat, and Calorific Power. The collection of questions will doubtless be useful to students preparing for examination, and to teachers endeavouring to familiarise their pupils with the details of chemical investigation.

LETTERS TO THE EDITOR

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

Professor Max Müller and the Insulation of St. Michael's Mount, Cornwall

THOUGH very much gratified at the fact that something from my pen has prompted Prof. Max Müller to give us another "Chip from his German Workshop," I was by no means prepared for the mode of treating materials which he has adopted in the Chip to which I refer—his paper on the "Insulation of St. Michael's Mount."*

As the author states, I read a paper to the British Association in 1865, at Birmingham (not Manchester as he supposes), and in April 1867, delivered a Friday evening lecture at the Royal Institution; each having the same title as his paper just mentioned.

With the exception of fifteen lines in the Report of the Association, the first was never printed either *in extenso* or in abstract. I conclude from the Professor's paper, however, that he saw a notice or report of it in some newspaper or journal; but, if so, I can only say that it was neither written nor corrected by me, nor with my knowledge, and that I decline to be responsible for it.

The lecture in 1867 was delivered from very brief notes, but an abstract of it was subsequently written by myself for the "Proceedings of the Royal Institution," and, printer's errors excepted, contained my opinions on the question.

It is clear from Prof. Max Müller's paper that a copy of this abstract was in his possession when he wrote his article. Indeed, the "short account" of the Mount which he "quotes" from me is from it, and not from the paper of 1865. Though substantially correct, this quotation contains three errors which may as well be set right in passing. On page 330 "very high water" and "very low water" (lines 9 and 10) should be "every high water" and "every low water," and "the total isthmus" (line 13) should be the "tidal isthmus."

In the paper of 1865 the following points were assumed:—(1) that the old Cornish name of the Mount was "Cara clowse in Cowse;" (2) that it had been correctly translated as the "hoar rock in the wood;" (3) that the name was appropriate when given; and (4, on the authority of Dr. Boase and Dr. T. F. Barham) that Florence of Worcester expressly stated that "the Mount was formerly five or six miles from the sea, and enclosed with a very thick wood." Though fully aware that each of these points might be open to question, I supposed them to have, at least, a fair amount of evidence in their favour, and hence concluded that the insulation of the Mount had taken place since the introduction of the old Cornish language into the district. Now, such insulation must have been the result of the encroachment of the sea merely, or of a more or less general subsidence; and my object was to show that it was the latter. In order to do this I attempted to dispose of the first hypothesis—insulation by encroachment without subsidence. A careful personal investigation of the Mount and the mainland, and the evidence of an old intelligent native, led me to the conclusion that to take the average retrocession of the cliff at ten feet in a century would probably be an excessively high estimate, and that, even at this rate of waste, "the hypothesis of insulation by encroachment only, appeared to demand the belief that at least twenty thousand years ago Cornwall was inhabited by men who spoke a language which prevailed in the same district to within a very few centuries of our own time, and which, from its similarity to the Welsh, might be said to be spoken still by a large population within our own island." Believing this conclusion respecting the antiquity of the Cornish language to be utterly untenable, I at once rejected it, and, with it, the hypothesis of insulation by encroachment merely, remarking of it that it "squandered time most lavishly."

I am, of course, delighted to find myself supported by Prof. Max Müller in the rejection of this vast antiquity of the Cornish language, for he tells us (p. 364) that it "would completely revolutionise our received views as to the early history of language." It is strange, however, and probably only to be accounted for by his trusting to a newspaper report of my paper, that he supposes that, instead of rejecting it, I have "adduced evidence in support" of this great antiquity (p. 354). The point of my argument was that the hypothesis of "insulation by encroachment without subsidence" could not be admitted, *because it led to an untenable philological conclusion.*

Turning next to the hypothesis of insulation through subsidence—the only alternative consistent with the assumptions made at the beginning—I proceeded to show that the numerous submerged forests which skirted the western coasts of England, and of which a good example in the Mount's Bay had been described by Dr. Bouse in 1822,† were to the geologist sufficient and satisfactory proof of a general subsidence of the country; and then pointed out that whilst, on the one hand, this change of level could not have occurred within the last 1,900 years, since, about 9 B.C.,

* "Chips from a German Workshop," vol. iii. pp. 336–357 (1870).
† Trans. Roy. Geol. Soc. of Cornwall, vol. ii. p. 129 *et seq.*