

certificate. Having obtained the certificate and possessing the theoretical as well as the practical knowledge, they would quickly be on the look-out for official appointments, and if there was an unwillingness on the part of the Local Authorities to appoint them, the necessary pressure to compel them to do so would be forthcoming."

If Mr. Nicholson could induce the Sanitary Institute to add a lecture on "The Nature of Smoke" to the course he prescribes, and was to attend it, he would find the information of distinct advantage in dealing with "smoke abatement."

The Preservation of Antiquities, a Handbook for Curators. Translated from the German of Dr. Friedrich Rathgen by Dr. G. A. Auden and Dr. H. A. Auden. Pp. xiv+176; with 48 figures in the text. (Cambridge: University Press, 1905.) Price 4s. 6d. net.

DR. RATHGEN states in his preface to the German edition of this little book that it is intended to stimulate curators and others interested in the preservation of antiquities to make public their experiences in this branch of archæology.

The first part deals with the changes brought about by the long-continued action of soil, moisture, and air on metals, glass, organic substances, limestone and clay; the materials of which "antiquities" are most usually composed. This is a subject about which very little is known, one of the commonest cases, the "rusting of iron," being still a subject for argument and speculation among chemists. The author, therefore, is only able, as a rule, to state the effects produced by these natural agents, and in comparatively few cases can suggestions be made as to the modes by which these effects are brought about.

In the second part, methods of cleansing recently disinterred antiquities of various kinds and of preserving them are given, and here the author is able to quote largely and usefully from his own wide experience of this work.

The translators have added to the English edition some notes of recent work and additional illustrations which are useful in elucidating various points in the text. The book should be useful not only to curators for reference, but should prove suggestive to all interested in the preservation of natural or artificial structures exposed to the action of air, soil, or moisture.

Organography of Plants. By Dr. K. Goebel. Authorised English edition by Prof. I. Bayley Balfour. Part i., pp. xvi+270. 10s. net. Part ii., pp. xiv+708. 21s. net. (Oxford: The Clarendon Press.)

THE German edition of the "Organography" has already been reviewed in NATURE (vols. lviii., p. 74, lxiii., p. 149, lxvi., p. 51), and it is unnecessary, therefore, to insist again on the importance of Prof. Goebel's book, both to botanists and to others who are interested in the development of plant life.

The Clarendon Press is to be congratulated on having secured Prof. Bayley Balfour to undertake the responsibility of preparing the English edition, and his name on the title-page carries with it the assurance that the work has been well done. Moreover, his great knowledge of plants has enabled him to give that indefinable cast of originality and interest to the translation that one so often misses in presentations of this kind.

The text is well broken up, by means of headlines and by the use of different founts of type, thus rendering the book more easy to use. The printing, and also the figures, are excellent, and there is a good index, both of illustrations and of subject-matter.

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Both the Clarendon Press and the editor have laid English-speaking botanists under obligation by the excellent production in our own language of this important work.

J. B. F.

Catalogue of the Madreporarian Corals in the British Museum (Natural History). Vol. v., The Family Poritidæ, ii., The Genus Porites, Part i., Porites of the Indo-Pacific Region. By Henry M. Bernard. Pp. vi+303+xxxv plates. (London: The Trustees of the British Museum, 1905.)

In the preparation of this important catalogue Mr. Bernard was confronted with the difficulty, experienced by nearly all naturalists who have attempted to arrange corals in specific groups, that the characters afforded by the skeletal structures only are so variable that there is no possibility of accurately defining the limits of "species." This is a difficulty which is wont to grow rather than dwindle as our knowledge of specimens of a genus increases, and Porites being a common and widely distributed coral, represented in the museum by very many specimens from numerous localities, the difficulty presented itself in a particularly exaggerated form.

No one will deny that the binomial system when applied to such a genus is unsatisfactory, and it will probably remain so unless further investigation of the anatomy of the living polyps reveals some characters of better value for purposes of classification. But the system adopted by Mr. Bernard, of abandoning the old specific names and giving the specimens a geographical label and a number, does not appear to offer a more satisfactory solution of the problem, and will not, probably, be generally approved. Unsatisfactory as they may be, many of these specific names are of some value, and all of them of historical interest. To sweep them all away at a stroke is a drastic measure which cannot be recommended, either on the ground of science or expediency.

But even if Mr. Bernard's system is disapproved, naturalists will undoubtedly agree in their tribute of thanks for the skill and patience he has displayed in building up this monumental work on the Indo-Polynesian specimens of the genus. The detailed description of the specimens in the museum will be of value to those who may, in the future, be tempted to grapple with the species question in the genus; but a real and important contribution to knowledge is to be found in the concise statements concerning the morphology of the skeleton and the affinities of the genus. The catalogue is adequately illustrated.

Microscopes and Accessories: How to Make and Use Them. Edited by Paul N. Hasluck. Pp. 160. (London: Cassell and Co., Ltd., 1905.) Price 1s. net.

WE are very doubtful whether the first portion of this book, dealing with the practical construction of a microscope by the amateur, will serve any useful purpose. Such an instrument, however well constructed, must almost inevitably fall far short of the perfection attained by the instrument makers, even if the amateur be a first-class mechanic, and efficient instruments may nowadays be picked up second-hand at ridiculously low prices. In the description of the tube, all that is said with regard to the attachment of the objective is that at the bottom (of the tube) a disc of brass is sweated on, the hole in its centre being $\frac{3}{8}$ in. diameter, and chased with a fine thread; not a word about the standard screw now adopted by all makers. The latter portion of the book, dealing with the preparation and mounting of objects, is concise and to the point, but presents nothing novel in its treatment of the subject.

R. T. HEWLETT.