

past history of a group by studying its species. If the species are well defined and show elaborate adaptations to the environment the group has long existed under relatively uniform conditions. If, on the other hand, the species are defined with difficulty and connected by numerous races it may be presumed that the environment of the group has changed in recent times, and especially that it is undergoing expansion and differentiation in new territory. In northern regions the retreat of the ice has exposed much such territory; in the Antilles it has been the elevation of the land; in other cases a type may have found new lands by migration, and may thus exhibit incipient new species in the midst of a stable ancient fauna. As an example of the last-mentioned class may be mentioned *Danaë berenice jamaicensis* in Jamaica, as against the old Jamaican type *Papilio homerus*. We have digressed from the immediate subject of this useful catalogue, but the interest of such works lies largely in the suggestiveness of their orderly and condensed array of facts.

T. D. A. COCKERELL.

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Industrial Electricity. Translated and adapted from the French of HENRY DE GRAFFIGNY. Edited by A. G. ELLIOTT, B.Sc. London and New York, The Macmillan Company. Pp. 152. With 65 illustrations. Price, 75 cents.

This little volume, according to the editor's note, is the first of a series upon Electromechanics, the other volumes of which will treat the more important of the branches here touched upon, separately and in detail. It is divided into short chapters, and explains, in very clear and non-mathematical language, the various applications of electricity.

Beginning with Nature of Electricity, a *résumé* of Hertz's work is given, showing the identity of light and electrical vibrations. Then follow, in order, chapters on Electric Units, Magnetism and Induction, and Practical Measurement of Electrical Quantities.

Chapters V. and VI. are respectively on Chemical Generators of Electricity and Accumulators, covering the subjects of primary and storage batteries and containing much useful information and explicit directions as to handling and care.

Dynamo Electric Machinery is next touched upon, including direct current dynamos, alternators, two- and three-phase generators. The remaining five chapters merely touch upon the following subjects: Electric Light, Electricity as a Motive Power, Electro-chemistry and Electro-plating, Bells and Telephones, and Telegraphs.

The only criticisms that can be advanced are:

1. On page 12 the table gives 10^2 C.G.S. units in one Henry instead of 10^9 , while the table on page 27 has many of the dimensions of the mechanical, electro-magnetic and magnetic units given incorrectly.

2. Besides these lapses the volume is, with one or two exceptions, entirely devoid of allusions to American apparatus and machinery.

Taken as a whole, however, the volume is a creditable piece of work, for the task of condensing so much in so small a space is, to say the least, herculean.

W. H. F.

GENERAL.

THE Teachers' Professional Library, edited by Professor Nicholas Murray Butler, of Columbia University, is announced by The Macmillan Co. The books already published on 'The Development of the Child,' by Dr. Nathan Oppenheim; 'The Study of Children and their School Training,' by Dr. Francis Walker, and a 'Handbook of Nature Study,' by O. Lange, are included in the series and the following are announced for early publication:

'The Practical Lessons of History,' by William T. Harris, LL.D., U. S. Commissioner of Education.

'Social Phases of Education in the Home and in the School,' by Samuel T. Dutton, Superintendent of Schools, Brookline, Mass.

'Educational Aims and Educational Values,' by Dr. Paul H. Hanus, Harvard University.

'The Hygiene of the School and of Instruction,' by Edward R. Shaw, Ph.D., New York University.

'Method in Education,' by Walter L. Hervey, Ph.D., Department of Education, New York City.

'The Study and Teaching of History,' by Miss Lucy M. Salmon, Vassar College.

'The Study and Teaching of Geography,' by Dr. Jacques W. Redway, of New York.

'The Study and Teaching of English,' by Percival Chubb, of the Ethical Culture Schools, New York.

'The Study and Teaching of Mathematics,' by