

morphology and syntax, though presenting some peculiarities, are not excessively complicated. It is incorporative in a high degree, a unique trait of its inflexion being the incorporation in the verbal stem not only of the object, but of a generic particle which includes it. Another oddity is the attraction of the number of the object to that of the subject, as if we were to say, 'I teach him,' and 'we teach him.' The grammatic analysis is ably carried out. The dictionary, taken from that of Father Gilberti who wrote in the sixteenth century, occupies 150 pages, and the texts, mostly religious and therefore of secondary value, are sufficient to show how Europeans wrote the tongue. A bibliography is added and a slight sketch of the history of the tribe. Both the authors are well known by their previous valuable contributions to American studies.

The work of Dr. Stoll is a continuation of his fruitful contributions to the ethnography of Guatemala. The K'ekchi is a dialect of the Mayan stock still spoken in the department of Vera Paz, Guatemala, by about 85,000 natives. It stands in near relation to the Quiche-Cakchiquel group of the stock, but is sharply contrasted with these idioms by the wearing away of many of the forms, especially in suffix verbal derivatives. This suggests at once that with respect to them it is of modern formation.

The author devotes about a hundred pages to the grammar, which he analyses with the same thoroughness which characterized his former essay on the Pokomchi and the Ixil dialects. The vocabulary presents over three thousand words in correct phonetic form, based on a variety of authorities.

The volume closes with thirty pages devoted to the Uspanteca dialect. This is spoken in and near the village of San Miguel Uspantan, and was formerly included in the Quiche group; but Dr. Stoll shows that it is more closely connected with the Pokom group.

The interest attaching to this work is enhanced by the recent investigations into the archaeology of the K'ekchi territory. Their ancestors probably erected the remarkable buildings at Copan, Quirigua and Tzac Pokoma; their pottery belonged to the most perfect on the continent; and the numerous mounds and sites throughout

their land still offer most attractive fields for exploration.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

#### SCIENTIFIC JOURNALS.

PSYCHE, SEPTEMBER.

A. P. MORSE continues his notes on the New England Tryxalinæ by a consideration of the genera *Chloealtis* and *Stenobothrus*, one species of each. F. L. HARVEY describes and figures a Thysanuran from Maine, possibly distinct from Packard's *Anoura gibbosa*. H. G. DYAR gives the life history of *Ichthyura strigosa* Grote. S. HENSHAW adds a new instalment of his bibliographical notes, being a list of the entomological articles in *Garden and Forest*, 1892-1895. The Proceedings of the Cambridge Entomological Club follow, the principal point of which is found in A. G. MAYER's account of the pigment in lepidopterous scales.

#### NEW BOOKS.

*The Biological Problem of To-day.* DR. OSCAR HERTWIG. Authorized Translation by P. Chalmers Mitchell. New York, The Macmillan Co. Pp. xix+148. \$1.25.

*Text-book of Paleontology.* CARL A. VON ZITTEL. Translated and Edited by Charles R. Eastman. Vol. I., Part I. Pp. 352, 593 Woodcuts. New York and London, The Macmillan Co. \$2.75.

*A Geographical History of Mammals.* R. LYDEKKER. Cambridge, University Press; New York, The Macmillan Co. 1896. Pp. xii+400. \$2.60.

*The Principles of the Transformer.* FREDERICK BEDELL. New York and London, The Macmillan Co. 1896. Pp. iv+416. \$3.25.

*The Gas and Oil Engine.* DUGALD CLERK. Sixth edition revised and enlarged. New York, John Wiley & Sons. Pp. xii+538.

*Modern Optical Instruments.* HENRY ORFORD. London, Whittaker & Co.; New York, The Macmillan Co. 1896. Pp. vi+100.

*A Catalogue of 16,748 Southern Stars.* LIEUT. J. M. GILLISS. Washington, Government Printing Office. Pp. xxxi+420.