

cerned withstand vicissitudes, as of warmth or moisture. It is to be observed that in *Cardamine*, *Sanicula*, *Ammi*, *Chærophyllum*, *Bellis*, *Lactuca*, *Vaccinium*, *Erica*, *Lysimachia*, etc., there are either no species but the endemic ones, or the other species are rare or local—probably usually of recent introduction.

We are naturally led to ask why the ancient fauna and flora, which must have been composed of a fair number of species, was so little able to acquire or preserve distinctive characters, when such islands as the Caymans in the West Indies, only a short distance from land, have many peculiar species, even of birds. One of the endemic beetles has its nearest ally in Madagascar, while one of the mosses is declared by M. Cardot to be *Philonotis obtusata*, described from Madagascar. These and other indications suggest that the population of the islands included, at least in part, forms which were not able to withstand the competition of westward-migrating types upon the continents, and which were liable to be driven out from their last stronghold on the islands by those same types as soon as they appeared upon the scene. It is probable that long isolated forms might lose the power of resisting disease or evading enemies, so that when these reached the islands continental types introduced at about the same time would have the advantage. Still again, if the islands have undergone changes of level and consequently of area, the competition must at times have become very severe, leading to the extinction of many species when the area was reduced; while an increased area would afford exceptional facilities for the immigrants.

T. D. A. COCKERELL.

MESILLA PARK, N. M., February 23, 1898.

The Antiquities of Tennessee and the Adjacent States. By YATES P. THRUSTON. Cincinnati, The Robert Clarke Co. 1897. Second Edition. Illustrated. Pp. 369.

It is only by a considerable stretch of bibliographic courtesy that this can be called a second edition of Mr. Thruston's book. It is, in fact, the signatures of the first edition, to which some pages, distinguished by letters, have been added, and two new plates. The

index does not include the additional material. As a treatise on the specimens of aboriginal art discovered in the area of the State, this volume must be preferred to others. The author has endeavored to verify the finds and to avoid the dangers of deception from 'fakes.' He is right in his conclusion that the remains reveal a condition of culture higher than that which obtained among the resident tribes at the period of the discovery. D. G. BRINTON.

Beiträge zur Völkerkunde der Deutschen Schutzgebiete. By FELIX VON LUSCHAN. Berlin, Dietrich Reimer. 1897. Mit 46 Tafeln und 48 Text Abbildungen. Folio. Pp. 87.

In this handsomely published volume Dr. von Luschan presents a mass of interesting material relating to various African tribes, notably the Massai, Swaheli, Togo, Cameruns, and also the New Britains. The earlier portions are devoted to physical anthropology, the measurements having been made in accordance with a very complete scheme which is detailed on page 6. Among the subjects may be noted two female dwarfs, in size about that of a nine-year-old child, but in functions, developed women. They apparently belonged to some of the interior pygmy races. The numerous accurate photographs which accompany these measurements add to their interest.

The ethnographic material represents a variety of articles of native manufacture. Among the decorations is a well marked 'svastika,' from the Togo district, undoubtedly locally developed there, and which is clearly traceable to a conventionalized lizard (p. 46). Such examples should suggest caution to those writers who are wont to make so much of this common figure.

Another object (described and depicted, pp. 65, 66) is the 'throwing-stick.' It is common in New Holland and in various parts of Oceania, and, as is well known, recurs in several areas of North and South America. Mortillet has pointed out that it was familiar to the men of the 'reindeer period' of France; but the idea of von Luschan that, wherever it occurs, we should suppose it borrowed from those ancient hunters, will scarcely recommend itself to sober readers.

The ornamentation on the utensils from the Admiralty, Kaan and adjacent islands is judiciously analyzed, and the conventional modifications of the human figure skillfully explained. The wood-carving of New Ireland and the masks worn in the festivals supply other passages with suggestive matter. The work is a valuable contribution to the anthropology of the regions mentioned. D. G. BRINTON.

SOCIETIES AND ACADEMIES.

NEW YORK ACADEMY OF SCIENCES—SECTION OF BIOLOGY, MARCH 14, 1898.

MR. BRADNEY B. GRIFFIN reported on the *Nemertina* collected by himself in Puget Sound and Alaska. After briefly reviewing the previous work upon North Pacific *Nemertina*, he urged the priority of Stimpson's generic terms *Emplectonema* and *Diplopleura* in place of *Eunemertes* and *Langia*; he commented upon the occurrence of closely related though distinct species on the west coasts of both Europe and North America. The occurrence of *Cerebratulus marginatus* Renier was recorded. Among the new species described is a new *Carinoma* which occurs abundantly and presents two or three varieties, one of which burrows in the hard clay among Pholads. The remaining new species are distributed as follows: *Carinella* 2, *Amphiporus* 4, *Lineus* 1.

Mr. W. H. Hornaday described the destruction of bird life in the United States, from data which he secured from all parts of the country. Circulars containing the following questions were sent out to trappers, guides, sportsmen and naturalists in all parts of the United States:

(1) Are birds decreasing in your locality? (2) How many birds are there now compared with fifteen years ago? (3) What are the most destructive agents? (4) Are any birds becoming extinct? The answers came from all but four States and Territories and showed surprising agreement. The most destructive agencies are sportsmen, plume-hunters, boys after eggs, pot-hunters, fire, English sparrows, etc.; and through these it has been estimated that there has been a decrease of 46 % during the last fifteen years. It was shown that game and edible birds are becoming scarce, and that

song birds are being used for food in their stead; that plume-birds are becoming extinct, and that destructive agencies are increasing. Mr. Hornaday concluded with an appeal for more drastic measures in our game laws and for their careful execution.

Mr. N. R. Harrington reported on a collection made by himself of Crustacea from Puget Sound, worked up by W. T. Calman, University College, Dundee, Scotland. The paper dealt with sixty-three species, three of which were new, and several little known. Perhaps the most interesting part of the work related to a parasite, *Pseudoniti giardi* n. sp., of which male, female and larva were all described from a single specimen found on *Eupagurus ochotensis*. A new species of amphipod, *Polycheria osborni*, is interesting, because the only other known representative of this genus is found in the Antarctic region. The collection is divided up as follows: *Macrura*, 15 species, thirteen of these being shrimps; *Brachyura*, 34 species; *Iso-poda*, 6 species; *Amphipoda*, 3 species; *Copepoda*, 1 species.

The final paper was given by Mr. H. E. Crampton on his experiments on insect grafting, and upon one case in particular, where the colors of scales of one species were imposed upon the scales of another. GARY N. CALKINS,

Secretary of Section.

NEW BOOKS.

A Text-Book on Roofs and Bridges. Part IV., *Higher Structures.* MANSFIELD MERRIMAN, HENRY S. JACOBY. New York, John Wiley & Sons; London, Chapman & Hall, Ltd. 1898. Pp. ix+276.

Introduction to Electro-Chemical Experiments and Practical Exercises in Electro-Chemistry. FELIX OETTEL; translated by EDGAR F. SMITH. Philadelphia, P. Blakiston, Son & Co. 1897. Pp. vii+143, 75 cents; and pp. vii+92, 75 cents.

Alternate Currents in Practice. Translated from the French of Loppé and Bouquet, by FRANCIS J. MOFFETT. London, Whittaker & Co.; New York, The Macmillan Co. 1898. Pp. 376. \$5.

La photographie et l'étude des nuages. JACQUES BOYER. Paris, Mendel. 1898. Pp. 80.