

be highly organized and surprisingly "modern" in aspect, thus showing that our knowledge of the actual starting point for this now dominant group is still imperfect. Mention may be made of a few of the more interesting forms. A small *Sagittaria*-like leaf is described under the new generic name of *Alismaphyllum*. What appears to be a fruiting sedge is included under *Cyperacites*, while under the name of *Plantaginopsis* is figured a plantain-like leaf and fruit possibly belonging to the Xyridales, which completes the list of monocotyledons. The dicotyledons are included under *Populus*, *Populophyllum*, *Nelumbites* (a very *Nelumbo*-like leaf formerly referred to *Menispermities*), *Sapindopsis*—the most abundant and important dicotyledonous plant of the time—*Celastrophyllum*, a form-genus suggesting the Celastraceæ, *Sassafras*, quite closely approximating the living form, *Araliophyllum* and *Ficophyllum*, form-genera recalling *Aralia* and *Ficus* respectively, and a few others that are without very clearly understood living affinities. Altogether, the elaboration of the Lower Cretaceous floras of Maryland is of a high order, and Mr. Berry is to be congratulated on the completion and publication of the work which must long remain as a model of its class.

F. H. KNOWLTON

Woodland Idyls. By W. S. BLATCHLEY. Indianapolis, Ind., The Nature Publishing Co. 1912. Pp. 242.

Mr. Blatchley has again published a nature book, interesting, instructive, enjoyable. Just the kind of a book to take out on a summer vacation to impart the love of nature and her creatures and teach one the value of simple things. It is a chronicle of several vacations spent in the fields and woods, camping at night in a tent, by day fishing, watching birds and insects, and taking notes on the happenings around him. Mr. Blatchley is qualified to speak knowingly and scientifically of nature's secrets, by long years of investigation in various phases of zoology and botany. The specialist will find here many little notes on the habits of birds, fish, turtles, small mam-

mals and insects fresh from the mind of a careful observer. Like a clear, sweet, woodland brook, there runs through all a philosophic, yet optimistic strain of adaptation of human needs to the simplicity of nature.

N. BANKS

The Evolution of Animal Intelligence. By S. J. HOLMES. New York, Henry Holt. 1911. Pp. iii + 296. \$2.75.

Professor Holmes gives a rather popular presentation of some of the recent work in animal behavior. He does not pretend to make his treatment of the field of behavior at all complete. The subjects he treats at some length are as follows: tropisms; behavior of protozoa; instincts and their origin; pleasure, pain and the beginnings of intelligence; types of intelligence in crustaceans, mollusks, insects, lower vertebrates and mammals. The final chapter is devoted to the study of the mental life of apes and monkeys.

While most if not all of these subjects have received more skilful treatment in the hands of Jennings, Mast, Washburn, Yerkes and Thorndike, Holmes gives a readable presentation of certain phases of behavior which will be of service to students beginning the study of comparative psychology. The book's value lies in the readiness with which it lends itself to pedagogical purposes.

JOHN B. WATSON

JOHNS HOPKINS UNIVERSITY

Butterfly Hunting in Many Lands: Notes of a Field Naturalist. By GEO. B. LONGSTAFF, M.A., M.D., Oxon. Longmans, Green & Co. 1912. Pp. xviii + 724, with sixteen plates, seven colored. Price, \$7.00 net.

The author describes this work as "an attempt, possibly a foolish one, to put into a readable form the technical diaries of a wandering entomologist, and to entomologists alone it appeals." The reviewer is inclined to agree. After a chapter on early reminiscences, Dr. Longstaff devotes nearly five hundred pages to notes on his captures from 1903 to 1910, during which time he visited Canada, certain of the West Indies, Panama,