

out. A discussion followed, introduced by this note on the resemblance between the Pacific fauna and that of Europe, and various explanations for the similarity shown were suggested.

—The first paper was by Mr. Ashmead, and was entitled "Some Remarks on the Characteristics that Distinguish the Families of Ants." The author stated that he had separated the ants into seven distinct families, five of which had been previously recognized as subfamilies, and two were new divisions. It was stated that the characters of the males, especially the genitalia, were particularly satisfactory, enabling the prompt reference of specimens, but that in the females and workers the characters were less satisfactory. The paper was illustrated with sketches showing structure, and examples of the seven families were exhibited.* The paper was discussed by Messrs. Banks and Pratt. The latter called attention to the use of *Cephalotes* in Brazil as food.

—The second paper was by Mr. Banks, and was entitled :

A NEW SOLPUGID FROM CALIFORNIA.

By NATHAN BANKS.

Several years ago Dr. A. Davidson, of Los Angeles, California, sent me a small collection of spiders, and among them a pretty little Solpugid. While studying some Mexican species recently I took occasion to examine this form, and, on its proving to be new, drew up the following description :

Cleobis californica, n. sp.

Length 9 mm., head 1.7 mm. long, broad 2 mm., mandibles [plus finger] 2.5 mm. long. Head yellowish, blackish on posterior sides, eyes on a black spot; mandibles yellowish, the fingers reddish; palpi pale, a broad dark band on the middle of the metatarsus; legs pale, all but the first pair infuscated above on the femora, tibiæ, and metatarsi; abdomen rather purplish, paler at base, a median darker stripe not distinct. Front border of head curved, but not as much as in some other species; the eyes small, nearly twice their diameter apart; median groove not very distinct; mandibles long, the fingers long and slender, the upper one has three teeth of nearly equal size, between the outer two is a smaller one, and basad of the inner one there are several on the fond of the jaw; the lower finger has a large tooth near base, then a much smaller one at its foot, and beyond is a medium-sized tooth; beyond this last there are seven denticles, giving the finger a serrate appearance when seen from the side;

* The paper will be published elsewhere.

the mandibles are clothed with stiff, reddish bristles; the legs and palpi are of the usual shape, and clothed with moderately short hairs and some spines; the triangular piece at base of venter has a depressed area on its posterior part, broadest behind, and its margin each side terminated by a deep indentation.

One specimen, Los Angeles, California [Davidson]. It is easily distinguished by the serrate appearance of the lower finger [which does not occur in any other species], and by the coloring of the palpi.

Discussion followed by Messrs. Ashmead, Banks, and Marlatt relating more particularly to structural characteristics commented on by the author of the paper, and particularly the value of the mandibular teeth of insects in classification, Mr. Ashmead speaking of the use of this characteristic in the classification of ants by old authorities; and the modification or wear of the teeth in old specimens was also noted and the important modification which wear sometimes effects in the case of cicada larvæ two or three years after moulting was described by Mr. Marlatt.

—The third paper was by Mr. Dyar, and was entitled:

DESCRIPTIONS OF THE LARVÆ OF FIFTY NORTH AMERICAN NOCTUIDÆ.

By HARRISON G. DYAR.

The Noctuid larvæ here described are from the collection of the U. S. National Museum, and are those of which descriptions have not been previously published to my knowledge.

Unless otherwise stated, the head is rounded, almost as high as wide, moderately bilobed, the clypeus reaching about half way to the vertex; slightly retracted below joint 2. Cervical shield indistinct, not cornified. Body cylindrical, abdominal feet equally developed on joints 7 to 10 and 13; joint 12 not, or but slightly, enlarged. Tubercles normal, single, iv behind the spiracle, about equally distant from iii and v or nearer to iii than to v. The longitudinal lines are the dorsal, situated centrally on the back, unpaired; the subdorsal, half way between the dorsal and the spiracles, paired; the lateral, half way between the subdorsal and the spiracles, not touching the latter; the suprastigmatal or stigmatal, just touching the tops of the spiracles or partly enclosing them and occupying all the space between the lateral and substigmatal lines; the substigmatal running below the spiracles and enclosing their lower portion. The ordinary lines are the