

and *nasutus* are included by Day in his *lamta*. This specimen of McClelland's was described under the name of *Platycara nasuta* and incidentally has only six anal rays, the number which Day gives as distinguishing his *modestus* from *lamta* and *jerdoni*, but which I have already shown to be frequent in *lamta* (of Day). Evidently Day considers McClelland's *D. nasutus* to be really *D. lamta* with the snout constricted, a secondary sexual modification. Consequently the three Indian species of *Discognathus* according to Günther are included by Day in his *lamta*. Now Day gives for *lamta* a very wide distribution, for *jerdoni* and *modestus* on the other hand a very limited one, namely, the Bhavani River at the foot of the Nilgiris for the former and "probably Northern India" for the latter.

In conclusion there are no specimens of *Discognathus* in the Indian Museum which justify me in considering that there is more than one Indian species of this genus, but probably the examination of large numbers of specimens from different districts might lead to the establishment of well-defined varieties.

J. T. JENKINS.

## INSECTS.

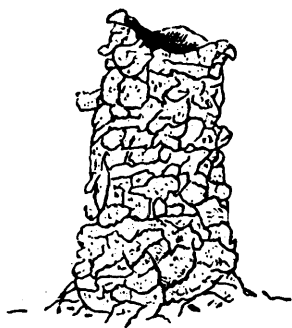
### Field Notes on Indian Insects:—

I. THE OCCURRENCE OF THE MYRMECOPHILOUS CRICKET *Myrmecophila quadrispina* IN INDIA.—One evening in July, 1907, I noticed a minute apterous cricket moving about on the top of a wall on the outskirts of Calcutta, surrounded by ants. Although its posterior femora were much thickened, it ran with great swiftness, much in the same manner as an ant. Having secured the cricket and some of the ants, I sent them for identification to the late Colonel Bingham, who returned them shortly before his lamented death, identifying the ant as *Iridomyrmex anceps*, Roger, and saying that Mr. Kirby had compared the cricket with the type of *Myrmecophila quadrispina*, Perkins, and found that it agreed fairly well with that species, with which he regarded it as specifically identical. The cricket was originally described from Hawaii, into which the ant has been introduced by man.

2. CURIOUS HABIT OF AN INDIAN JASSID.—Dr. D. Sharp, in his account of the insects in the *Cambridge Natural History* (vol. vi, p. 577), refers to the "phenomena known as weeping-trees," and states that these phenomena are due to the activities of Homopterous insects of the family Cercopidæ. In India, however, a similar phenomenon is sometimes produced by a common Jassid (*Tetigoniella ferruginea*, Fabr.), although it is not always easy to trace it to its proper source. While collecting insects on Paresnath Hill in Western Bengal last April, I was surprised on more than one occasion to feel what I thought to be rain dripping from a clear sky through the foliage of the trees, until a careful search revealed

the fact that the apparent rain fell directly from the leaves, and was produced by enormous numbers of Jassidæ settled on their lower surface. All these Jassids belonged to the species named; they were fully adult and existed in countless numbers on shrubs and trees of all kinds. A favourite tree was the common fig *Ficus cunia*. Each insect sat with its proboscis buried in the substance of the leaf, to the lower surface of which it clung, and apparently sucked in the sap, for at regular intervals (roughly three minutes) several drops of a honey-like liquid was squirted with some force from the tip of its abdomen. The number of individuals was sufficiently great to give rise to the phenomenon described, but they did not appear to be in any way banded together and took flight in all directions on the slightest disturbance.

3. THE NEST OF THE BEE *Podalirius pulcherrimus*.—During a short collecting trip in the Western Himalayas round Simla at the



Entrance to nest of *Podalirius pulcherrimus*.

beginning of May, 1907, I noticed that a hard clay bank near the bungalow at Matiana (28 miles north-east of Simla) was riddled with round holes about 20 mm. in diameter. Some of these holes were surmounted by small turrets of rough clay pellets of various shapes and sizes, the turrets being about 30 to 40 mm. in height. Bees were constantly entering and emerging from the tops of the turrets, and the holes were obviously their burrows. Each burrow ended at a depth of a few inches, after one or more turns, in a small oval chamber, the base of which was lined with pollen kneaded into a paste. No eggs were found, but probably the time for oviposition had not yet come. The bees were identified for me by the late Col. Bingham as *Podalirius pulcherrimus*. Most of the turrets were washed away by a shower of rain during the night, and the bees made no attempt to rebuild them; indeed they probably would have been unable to do so without making fresh excavations. Owing to the direction in which the burrows opened, however, the rain did not enter them to any great extent. The figure has been drawn from a specimen in the collection of the Indian Museum that has been preserved by means of glue.

N. ANNANDALE.

#### XIPHOSURA.

THE HABITS OF INDIAN KING CRABS.—Two somewhat variable species of King Crab (*Limulus moluccanus* and *L. (Carcinoscorpius) rotundicauda*) are common in Indian waters; but little information is available as regards their habits, which seem to differ considerably from those of the Japanese and American forms. Observations made in 1901 on the east coast of the Malay Peninsula and recently