

was separated from the shore of the island by a band of water which had a slightly yellowish tinge, caused by its shallowness and the colour of the coral-built bottom. The lagoon channel was very shallow, and in many places it was possible to wade from the shore to the outer edge of the reef. The reef, in short, may be regarded as a transitional stage between a fringing and a barrier reef.

The vegetation of Matuku is very different from that of Tongatabu, though no doubt much like that of Eooa. Ferns are numerous instead of scanty, and amongst them a beautiful climbing species (*Lygodium reticulatum*) is abundant. At the time of the visit the most conspicuous trees, after the screw pines and cocoanut palms, were those of a species of *Erythrina*,<sup>1</sup> which was in full scarlet blossom. On the honey of the flowers of this tree a most beautiful Lory (*Domicella solitaria*) was feeding, and with it some little Honey Birds (*Myzomela jugularis*). The Lory is one of the most beautiful little parrots existing, showing a splendid contrast of the richest colours, jet black, red, and green. It is peculiar to the Fiji Islands, and flies in flocks, and hence the term "*solitaria*" is apt to give an erroneous impression as to its habits. A Swallow (*Hirundo tahitica*) was flying about in considerable numbers at the summit of the peak. Several lizards were found at the Fijis, *Hemidactylus* sp., at Matuku, and *Gymnodactylus* sp., one of the Agamidæ, at Kandavu, and *Mabouya cyanura* at both islands.

Hopping about on the mud beneath the mangroves on the shore was the extraordinary little fish, *Periophthalmus*, which skips along with great rapidity on the surface of the water by a series of jumps, each being as much as a foot in length, and it prefers escaping in this way to swimming beneath the surface. It is very nimble on land, and difficult to catch, using its very muscular pectoral fins to spring with, and when resting on shore the fore part of its body is raised and supported on these. The eyes of the fish, which is one of the Gobies, are remarkably prominent, projecting directly upwards from the skull. In the mangrove swamps the fish often sits on the lower branches and roots. From what is known of its habits, it is probable that it would be drowned by long immersion in water. The Fijian species is *Periophthalmus koelreuteri*. Its prey is said to consist of terrestrial insects<sup>2</sup> and Crustaceans left by the receding tide; according to Semper it feeds also on *Onchidium*.<sup>3</sup>

Sixteen species of land shells were obtained at the Fiji Islands, among them one novelty, *Helix (Trochomorpha) latimarginata*, E. A. Smith.<sup>4</sup>

The Arachnida obtained by the Expedition at Matuku were *Meta tuberculata*, Keys, *Meta granulata*, Walck., *Nephilengys* sp. ?, *Nephila* sp. ?; from Kandavu were brought *Epeira moluccensis*, Dol., *Epeira mangareva*, Walck., *Meta tuberculata*, Keys, *Meta*

<sup>1</sup> *Erythrina indica*. The "Araba" flowers in August, the time to plant yams; hence the flowering of this tree is the basis of the Fijian calendar. Seemann, *Flora Vitiensis*, London, 1865-73.

<sup>2</sup> Dr. A. Günther, *Brit. Mus. Cat.*, Fishes, vol. iii. p. 97, 1861; *Introd. Study of Fishes*, p. 487, Edinburgh, 1880.

<sup>3</sup> *Animal Life (Internat. Sci. Series)*, p. 189, London, 1881.

<sup>4</sup> *Proc. Zool. Soc. Lond.*, p. 270, 1884.