

surface, by which small particles of food or minute animals can be caught. No doubt these forceps catch the food of the *Atya*, and the larger legs with simple pointed ends enable it to hold on to the stones in the rapid stream.

The pair of forceps is not attached directly at its hinge joint to the end of the limb, but at a point on the side of one of the arms. Here it is hinged on to a crescent-shaped joint, into the crescent of which the rounded end of the forceps is received when the apparatus is retracted and at rest. The complicated manner of jointing gives a very wide sweep and great mobility to these very curious prehensile organs.

The genus *Atya* must, from its very wide distribution, be a very ancient one. Species of the genus occur in the West Indies, in the Philippines, in Samoa, and in Mexico, besides in the Cape Verde Islands. The Cape Verde species* is possibly identical with one occurring in Mexico. In Mexico and the West Indies the animal occurs in the sea: elsewhere in fresh water.

I am greatly indebted to Sr. Jose M. Quirino Chaves, U. S. Vice-Consul of Porto Praya, who most kindly sent me specimens of the above described crustacea, on my writing to him, when preparing this journal for the press. The only specimen which I secured on my visit was lost by accident on board the "Challenger." The Palæmon is called in the island "Christao," the *Atya* "Mouro."

John Antonio said there were no fish in the San Domingo stream, "cos river fresh water." He evidently thought that fish were to be found only in the sea.

We passed the village of San Domingo, which consists of scattered thatched stone houses, and the road became worse and worse, being sometimes knee-deep in mud. The ponies, small fine-built bays, began to show signs of giving in, and soon spurring would not make mine move further. I had to dismount and flounder back to a cottage, where we had a rest, and fed the ponies with grass. The excursion up the mountain is evidently too long for one day, although John Antonio had declared beforehand that it was an easy matter. I had been riding five hours, and we were still a long way from the place where the actual ascent commences. The ponies went very badly, at little more than a foot-pace. It was raining more or less during the whole time that we were in the valley.

* *Atya sulcatipes* (Newport). *A. scabra* (Leach). "Ann. and Mag. Nat. Hist.," 1847, p. 158, where is a list of species. Upolu is in it placed by mistake in New Zealand instead of Samoa. M. Edwards places *Atya* with *Alpheus*. Dana (U. S. Exp. Ex. Crustacea), places *Atya*, *Atyoides* and *Caridina* in a special family, *Atyidae*, next the *Astacidae*.