

The second pair of antennæ has a slightly tapering scaphocerite that reaches a little beyond the extremity of the peduncle of the first pair, and a flagellum that is twice the length of the animal.

The mandible carries a two-jointed synaphipod, the second joint is narrower than the first and reaches as far as the extremity of the peduncle of the second pair of antennæ.

The first pair of pereopoda is armed with two teeth, one on the inferior margin of the basis and another on the antero-inferior margin of the ischium. All the appendages of the pereion are furnished with a basephysis that decreases gradually to the posterior pair of pereopoda, where it is very reduced in size.

The first pair of pleopoda in the female carries a rudimentary membranous branch on the inner margin, near the distal extremity of the basal joint. The succeeding four pairs are subequally biramose. The sixth pair has the outer branch longer than the inner, and is armed with a sharp tooth on the outer side at the extremity.

Only a single specimen of this species, and that a female, was taken, and it differs from all the other species in having the basal branch attached to the several legs of the pereion, although small, yet much more important than the rudimentary ones which they possess.

*Philonicus pectinatus*, n. sp. (Pl. XXXVIII.).

Rostrum short, lanceolate, not reaching to the extremity of the ophthalmopod; dorsal margin armed with nine teeth, of which the posterior is slightly separated from the others and implanted on the gastric region a little in advance of the cervical furrow. Posterior dorsal surface of the carapace compressed but not carinated. Pleon carinated from the fourth somite to the sixth, where it terminates in a small tooth.

Telson dorsally longitudinally grooved, tapers to a point, and is distally armed on each side with a strong tooth; outer plates of the rhipidura nearly twice as long as the telson.

Ophthalmopoda with the ophthalmi reniform. First pair of antennæ having the pro-artema shorter than, and the stylocerite as long as the ophthalmopod. Second pair of antennæ having the scaphocerite longer than the peduncle of the first pair of antennæ, and narrowing to the distal extremity, which is rounded and carries a tooth on the outer angle.

All the other parts of the specimen are much broken except the pleopoda, the first pair of which is furnished with a petasma (*pp*) that carries a series of curved teeth on each side like a comb, from which the specific name is derived.

Length (male), 38 mm. (1.5 in.).

*Habitat*.—Station 188, September 10, 1874; lat. 9° 59' S., long. 139° 42' E.; Arafura Sea, south of Papua; depth, 28 fathoms; bottom, green mud. One specimen; male.