of the type, but differs from that of *Penæus serratus*, with which they were found associated. In these specimens the telson is armed with two teeth posterior to the two lateral spines, and therefore *Penæus rectacutus* may be only a variety.

Penæus serratus, Spence Bate (Pl. XXXVII. fig. 1).

Penæus serratus, Sp. B., Ann. and Mag. Nat. Hist., ser. 5, vol. viii. p. 182, 1881.

Rostrum slightly arched, armed with a series of small teeth, twelve or thirteen in number, between the base and the apex, and one distant on the gastric region; lower margin fringed with long, ciliated hairs, each of which stands on its own defined point of attachment. Posterior somite of the pleon more than twice the length of the penultimate. Telson nearly as long as the inner branch of the rhipidura, terminating in a styliform point, and armed on each side with a long and rigid tooth, and at some little distance anteriorly with two minute separate spines, the intervening space being fringed with hairs.

The ophthalmus is large, and the peduncle of the first pair of antennæ is rather longer than the rostrum. The flagella, in a young specimen, are about as long as their peduncle; they are damaged in the others. The prosartema is pointed, the stylocerite short, and the scaphocerite of the second pair reaches to the extremity of the rostrum.

Length of the largest female, 114 mm. (4.5 in.); of the largest male, 76 mm. (3 in.). Habitat.—Station 173, July 24, 1874; lat. 19° 9′ 35″ S., long. 179° 41′ 50″ E.; off Matuku, Fiji Islands; depth, 315 fathoms; bottom, coral mud.

Station 184, August 29, 1874; lat. 12° 8' S., long. 145° 10' E.; Torres Strait; depth, 1400 fathoms; bottom, Globigerina ooze; bottom temperature, 36° 0. One specimen, young. Length, 26 min. (1 in.).

The surface of the animal is smooth and even polished. It is slender in general shape—a circumstance that is probably partly due to the length of the sixth or posterior somite of the pleon, which is rather more than twice the length of the fifth. The rostrum, instead of being horizontal, rises slightly from the base and is depressed at the apex, so as to give it a slightly arched appearance. The lower margin is without teeth, but fringed with hairs, each of which is extremely long and ciliated, stands upon its own little elevated point of attachment, and is generally of a dark colour. The upper or dorsal surface is serrate with small teeth, placed closely together towards the base, but distantly separated towards the apex; on the gastric region a solitary tooth stands apart from the rest, at the extremity of a carina, which disappears until the fourth somite of the pleon, where it reappears in the form of a small ridge. This ridge becomes larger on the fifth and sixth somites, having its posterior extremity cleft on the fourth and fifth, and produced to a small tooth on the sixth. The telson is not so long as the inner branch of the rhipidura, and terminates in sharp and styliform points (fig. 1z), it is broadly channelled