carries a broad foliaceous pair, which is single in the male, and double-branched in the female, in which the inner branch is triarticulate, the first joint stout and cylindrical, the second short and foliaceous on the outer side, while the third is long, slender, and terminates in a few hairs. It is this inner branch that carries attached to it the numerous bundles of minute ova which in this one animal cannot number less than 60,000.

The posterior pair of pleopoda form the outer plates of the caudal fan and are broad and equally foliaceous.

Our specimens consist of one male and three females, only one of which was carrying ova. On the females, particularly on one, there is a large mass of black pigment uniformly deposited on each side on the ventral surface of the posterior somite of the pereion, the object of which I do not quite understand, but assume that it may be of similar nature to the white patches that are to be found attached to the same parts in the female of Astacus at the conclusion of the rutting season.

## Panulirus angulatus, n. sp. (Pl. XI. figs. 2, 3, 4).

Lateral walls of the carapace perpendicular, forming right angles with the dorsal surface; the angular ridges are prominent and very strongly serrate with three or four large teeth, the first being the largest, and anterior to the cervical suture, posteriorly to which they are of less importance, gradually lessening as they reach the posterior margin; on the gastric region are two rows of these small teeth; in the central line behind the cervical suture, is an elevated boss or lobe surmounted by three strong teeth, the posterior, which is broken in our specimen, being the largest; behind these in the same line is another boss or lobe with two teeth. Each somite of the pleon in the median line supports two or three teeth on an elevated ridge, of which the central of those on the second and third somites are the most conspicuous and prominent.

The specimen is undoubtedly a young animal, being only 36 mm . in length ( 1.5 inches) exclusive of the antennæ.

Habitat.—Station 219, March 10, 1875 ; lat. $1^{\circ} 54^{\prime}$ S., long. $146^{\circ} 39^{\prime} 40^{\prime \prime} \mathrm{E}$; Eastern Pacific, north of New Guinea; depth, 150 fathoms; bottom, coral mud; associated with Sicyonia lævis.

The carapace between the armature anteriorly to the cervical suture is smooth, but granulated rather coarsely posterior to it ; the condition on the lateral walls is similar, but the granulations posteriorly to the cervical suture run in parallel lines, radiating from the upper anterior angle just behind the cervical suture. The teeth along the lateral angle increase in size as they advance towards the anterior margin to the upper and inner canthus of the orbit, where the terminal tooth overhangs the eye, forming the upper surface of an imperfect orbit. There are no teeth between the supra-orbital teeth on the frontal margin, and none on the antennal somites.

