

mine, on any of the others. The pleon is short and without any evidence of possessing appendages.

The specimen next in size is from the Celebes Sea (Pl. XIIA. fig. 3) and is 7 mm. in length. That is, it has increased in dimensions about five times without any very great variation in form or growth of parts, and as there is in the development of separate species of the same genus and generally in different genera of the same family the same structural characters, I shall consider the several specimens taken as being successive stages in their relation to each other. The ocellus is still very distinct, and the ophthalmopoda have increased in length considerably and become biarticulate, one articulation at the base and the second at the root of the ophthalmus, which is long and pear-shaped. The first pair of antennæ is biarticulate but not biramose. The second shows evidence of becoming so, but not very conspicuously; at its base a series of cells are arranged in the form of a circle, and behind this the green gland appears in an incipient stage. The hepatic lobes, which in the previous stages were large and few, are here increased in number and arranged in a series of cæca symmetrically disposed on each side of the carapace, and which empty themselves into a longitudinal duct that is united with the main viscera near the stomach and above the oral apparatus.

The mandibles are distinctly visible, sharp-pointed, and enclosed between the cheiloglossa and the metastoma or posterior lip, behind which, and clasping it closely, the first pair of siagnopoda is visible, in form somewhat resembling that of the adult. The distance from this latter organ to the anterior margin of the pereion is considerable, corresponding as this does with the posterior margin of the cephalon. At the anterior angle of the pereion is a pair of biarticulate appendages, short and rudimentary, the second joint being shorter than the first. Near this is a second small but well-developed pair of unbranched five-jointed limbs, a few hairs existing on the two terminal joints; this is the first pair of gnathopoda. The next and three following pairs resemble each other; they are biramose, rather longer than the animal, seven-jointed and carry a long basephysis. The next succeeding, or seventh pair of appendages is short and feeble, being in an immature condition; it is four-jointed and carries a small basephysis. Posterior to this pair and situated in the angle formed by the union of the pleon with the pereion there is a small vesicle, the germ of another pair of appendages. The pleon is small and without any evidence of the future appendages.

The next specimen, and one which has the appearance of being the young of the same or a closely allied species, is from the West Pacific, and is about 14 mm., or double the length of the preceding (Pl. XII B. figs. 1-3).

The central eye has become reduced in size. The ophthalmopoda are two-jointed.

The first pair of antennæ has become four-jointed and biramose, the smaller branch springing from the distal extremity of the third joint. The second pair of antennæ is five-jointed and exhibits on the metope or ventral surface near the base of the antennæ a