

immature condition in the brephalos, which approaches the Megalopa stage and as yet no signs of the sixth pair of pleopoda are apparent, nor until after the animal has all the pereopoda in an advanced condition. In fact, a continuous advance in the development to this point has not been observed in the *Phyllosoma* of the Palinuridæ.

The earliest form of *Amphion* in the collection (Pl. CXLVI. fig. 1) was taken in the Pacific, and is 5 mm. (0.2 in.) in length. It is slender, and much resembles the *Zoca* of other Macrura, excepting that the eye is pedunculated.

The carapace is about 2 mm. long, and covers the entire pereion; it is narrow, being only a little broader than the anterior somites of the pleon, and is anteriorly produced at the fronto-lateral angles to a small tooth, but there is no rostral point visible.

The pleon is 3 mm. long, and is composed of six somites; the five anterior are subequal, the first being furnished with a small anteriorly directed tubercle on each side, which I take to represent the pleocleis of the adult; the sixth somite is equal in length to all the preceding. It gradually narrows and terminates in a gradually widening, broad, ovate, foliaceous, and spatuliform plate, posteriorly fringed with hairs, one on each side of the median line being small, and six exterior to these long.

The first or cephalic somite is anteriorly produced in the median line, and furnished with a small, round ocellus; on the upper surface on each side originate the ophthalmopoda, of which the peduncle is short and the ophthalmus long-ovate, somewhat pyriform in shape, and about 1 mm. long, or about half the length of the carapace.

The first pair of antennæ is about 1 mm. long, and two-jointed; the first joint, which is extremely long, appears to represent the peduncle; the second, which is short, represents the flagellum.

The second pair of antennæ is a little longer than the first, and consists of a basal joint that supports two branches, the inner one represents the flagellum, which is unarticulate, and reaches a little beyond the distal extremity of the first pair, and the outer is the scaphocerite, which is a little shorter than the flagellum, it is narrow at the base, and gradually enlarges distally; the extremity as well as the inner and outer distal margins are fringed with seven or eight long, slender hairs.

The oral appendages are at a considerable distance from the frontal margin of the cephalon, and implanted posteriorly to a semicircular epistoma.

The mandibles, which are immediately posterior to the epistoma, and on each side of the oral aperture, are sharply pointed, and do not carry a synhipod.

The three pairs of siagnopoda, as far as can be determined by a general examination without dissecting them out, appear to resemble those that will be more fully described in a later stage.

At about the same distance posteriorly as the mouth is from the anterior margin of the cephalon, the first pair of gnathopoda is situated; it consists of a short coxa and a long basis, the extremity of which carries the four succeeding joints of the true leg