

*Geographical Distribution.*—This restricted genus as far as known belongs to the southern hemisphere. *Palinostus lalandii* ranges from the Island of Tristan da Cunha to the Cape of Good Hope; *Palinostus frontalis* is found on the coast of Chili, and *Palinostus hügelii* was taken in the Indian Ocean.

*Palinostus lalandii* (Lamarck) (Pl. XI. fig. 1; Pl. XII. fig. 1).

*Palinurus lalandii*, Lamarck, MS., in Museum, Jardin des Plantes.

” ” Milne-Edwards, Hist. des Crust., t. ii. p. 293.

” ” on Pl. XI. fig. 1; Pl. XII. fig. 1.

Rostrum depressed and rapidly narrowing anteriorly to the apex, which has a tendency to curve upwards; just within the apex are planted two vertical processes (fig. 10, p. 85) that securely grasp the rostrum on each side. These calcified processes originate in the anterior wall of the ophthalmic somite, which proceeds in a direct line beyond the vertical processes, and terminate in an obtuse point on each side of the central line, corresponding in length to the rostrum.

In *Palinurus* and *Panulirus*, the first antennal somite is largely developed and forces the second pair of antennæ widely apart; in *Palinostus lalandii* it is reduced in size and forced down below the second pair of antennæ, which meet and articulate above it. The first or coxal joint, in all species of this family, is closely impacted and ankylosed with the anterior wall or metope of the cephalon, and meets its fellow in the median line beneath the rostrum; it sends forth a process that articulates with a similar one projecting from the lower and outer angle of the second joint; the upper and inner angle of the same joint articulates with a process which projects anteriorly from the first antennal somite, below the rostral points. This articulation is wanting in both *Palinurus* and *Panulirus*, and instead of it, the process of the antenna projects above and carries a membranous fold over the antero-lateral walls of the largely developed first antennal somite, under which lies the stridulating organ. This organ is absent in *Palinostus*.

The first pair of gnathopoda has only six joints, the meros and ischium being probably fused together into one which is short, thick, and scarcely longer than broad. The carpos is short, triangular, and articulates laterally and bends suddenly; the propodos is broad and the dactylos short and wide; the basal joint of the basephysis is nearly as long as the mero-ischial joint, and terminates in a long slender flagellum.

The second pair of gnathopoda consists of seven joints, the meros and ischium being free and articulated near the centre; the carpos articulates at the extremity; the propodos is narrow, increasing slightly in length towards the distal extremity, which is excavated to receive the long, narrow, and obtuse dactylos. The whole appendage is fringed with long hairs on the inner and distal surfaces.