

rows, each row containing about sixteen scales. Surface of peduncle furnished with very long and delicate bristles.

*Mouth*.—(Pl. X. fig. 1), *Labrum* bullate, with an anteriorly projecting and rather flat part. *Palpi* robust, with very numerous hairs at the extremity and on the outer surface; their shape resembles that of the last joint of the human thumb. *Mandibles* with three teeth, nearly equal, the first being only slightly longer than the two following ones. The inferior angle broad, rounded at the extremity, which is flat and indistinctly pectinated. The outer surface of the inferior angle is furnished with very delicate hairs. *Maxillæ* elongate, not very narrow. Free edge (Pl. X. fig. 2) without any notch; however, neither straight, being slightly excavated in the superior and slightly convex in the inferior half. The free edge is beset with a double row of strong spines; the superior angle shows only one great spine. It is much thicker but only slightly longer than the other spines. *Second maxillæ* with a rounded lobe at the anterior margin furnished with numerous hairs. The hindermost part of the outer surface over almost the whole length is also furnished with very long and slender hairs or bristles. Orifice of the so-called olfactory organ not placed on a long tubular process.

*Cirri*.—First pair with the rami unequal; the most anterior one has eight broader the posterior ramus twelve narrower, segments. The second pair has also unequal rami; one of twenty-one, and one of twenty-four segments. The other cirri have equal rami. The caudal appendages are relatively large, four-jointed, and furnished with a tuft of very long hairs at the extremity. There are also rows of very long hairs on the anterior margins of the other segments.

*Penis* wanting.

*Eggs* large (greatest diameter 1.03 mm., shortest 0.87 mm.); united in two flat masses, each of which contains two layers of ova. Number of eggs in each packet about 200.

*Complemental males* numerous. They have a long cylindrical shape, and are of a very simple structure (Pl. IX. fig. 12). In one of the full-grown specimens those of the one side numbered about half a dozen, those of the other side four. I have been able to study their anatomy by transverse sections. Details will be given in the third part of the present report. The length of the males is about 1.7 mm. They are covered by a mantle densely beset with very numerous spines. At the one side this mantle has a slit through which the rudimentary antennæ peep out. The opening of the genital apparatus is at the other extremity of the little animal. The structure of the genital apparatus shows the same parts as in the complemental males of the other species,—testis, receptaculum seminis, vas deferens.

*Scalpellum regium* (Wyv. Thoms.), n. sp., was dredged at two Stations. Station 61, June 17, 1873; lat. 34° 54' N., long. 56° 38' W.; depth, 2850 fathoms; bottom temperature, 1°·5 C.; bottom, grey ooze. Station 63, June 19, 1873; lat. 35° 29' N., long. 50° 53' W.; depth, 2750 fathoms; bottom, grey ooze.