

much larger and much more expanded above and behind; the third joint has three spines on the hind margin. The last five joints in this, as in the two preceding pairs, are much smaller than the last five of the first peræopods.

*Pleopods.*—The coupling spines on the peduncle are slender, with three or four retroverted teeth. The cleft spines are six in a series in the first and second pairs, five in the third pair. The outer ramus has seventeen or eighteen joints, the inner from fourteen to sixteen.

*Uropods.*—The first pair with peduncles longer than the slender, pointed rami; in the figure, *ur.* 1., the flat instead of the side view of these is given; the edges of the subequal rami are almost devoid of spines, but microscopically pectinate; the peduncles of the second pair scarcely as long as the rami, which are equal in length, with spines on the borders as well as pectination; the third pair have the peduncles shorter than the rami; the outer ramus with a nail, somewhat longer than the inner, both pectinate on both edges, with few spines and some plumose setæ; though shorter than the other two pairs, they project further back.

*Telson* elongate, distally narrowing, projecting beyond the peduncles of the last uropods; cleft not extending to the middle, more or less dehiscent for its whole length; the apices somewhat pointed, each containing a spine and a cilium; on each side near the outer margin there is a feathered cilium above, and a small spine below, the top of the cleft. In the figure, *Pl.*, the base of the telson is concealed by the peduncle of the third uropods.

*Length.*—The specimen, in the position figured, measured from the front of the head to the back of the second pleon-segment nearly two-fifths of an inch.

*Locality.*—Station 230, south of Japan, April 5, 1875; lat. 26° 29' N., long. 137° 57' E.; depth, 2425 fathoms; bottom, red clay; bottom temperature, 35°·5. One specimen; surface.

*Remarks.*—The powerful muscles exhibited by the compact first gnathopods suggested the specific name *musculosus*.

For the union of this species with Boeck's *Orchomene*, it is necessary in some respects to curtail his definition of that genus, omitting the epithet *prælongata*, which he applies to the inner plate of the first maxillæ, and the epithet *brevissima*, which he applies to the telson, as well as the statement that the telson does not reach the end of the peduncle of the third uropods. His own figure of *Orchomene pinguis* disagrees with this part of his definition, which may therefore well be dispensed with.

*Orchomene abyssorum*, n. sp. (Pl. XXI.).

*Head* apparently without any rostral prominence, lateral lobes largely developed, rounded; back rounded; pleon-segments as in *Orchomene musculosus*, except that the