

are long, the first joint a little curved, and much longer than the proboscis; at the ventral side this joint shows feebly an articulation near the base; the second is shorter, but furnished with very long claws, which are curved at the extremity, and both are armed with almost the same number of spines. The hairs on the mandibles are distant, the largest quantity being observed on the base of the immovable claw. The palpi are not very slender, yet a great deal longer than the proboscis; the second joint is the longest, then follow the third, the fifth, the fourth, and the first, which is the shortest of all. On the first two joints the hairs are not so numerous as on the last three joints.

The ovigerous legs of the female (the two specimens dredged by the Challenger were both females) are tolerably long and stout, once and a third as long as the body; the fourth, fifth, and sixth joints are nearly of the same length, the fourth being the longest, and the sixth the shortest. The four last joints again are of about the same length, the claw is slender, its length two-thirds the length of the last joint. Joints one to four are almost entirely smooth, with the exception of a row of hairs at the end of the fourth joint; joints five and six are furnished with numerous spines, the last four joints showing hairs only at the distal extremity. The spines of the four last joints (figured on Pl. II. fig. 8) are of a very irregular shape, and not very numerous, their numbers being respectively 10, 8, 5, 7. The spines of the claw are not very strong.

The legs are three times as long as the body (36 mm. in a body of 12 mm.). The second joint is longer than the first and third, and swollen, as is always the case in the females. The fourth joint is also very considerably swollen (with the ovaries), the fifth and the sixth joints are nearly of the same length, and a little longer than the fourth; of the two tarsal joints, which are together nearly two-thirds the length of the sixth joint, the first is longer than the second (Pl. XV. fig. 10). The claw is half the length of the second tarsal joint, auxiliary claws are wanting. The fourth joint of the leg is sparsely hairy, the fifth a little more so, the sixth is very hairy and shows some strong spines at the extremity, the two tarsal joints are covered with very minute hairs. The genital openings are large and easily seen.

*Habitat.*—Of this species two females were dredged along with *Nymphon longicoxa*, east of Auckland.

Station 168. July 8, 1874. Lat. 40° 28' S., long. 177° 43' E. Depth, 1100 fathoms. Bottom temperature, 2.0° C. Sea bottom, grey ooze.

*Observations.*—*Nymphon longicoxa* and *Nymphon compactum* were obtained from a depth of 1100 fathoms. *Nymphon longicoxa* shows rudimentary eyes, those of *Nymphon compactum* are quite obsolete. *Nymphon longicoxa* is one of the most slender, *Nymphon compactum* one of the stoutest species dredged by the Challenger. In the one the auxiliary claws are wanting, whereas small ones are present in *Nymphon longicoxa*, and in every other respect they are as widely different as two species of the same genus of Pycnogonids can be. *Nymphon compactum* shows some relationship to *Nymphon stræmii*,