

The ovigerous leg of the full-grown female is almost entirely straight. The difference in length between the fourth and the fifth joints is not so considerable as in the males; the denticulated spines on the four last joints are more numerous than in the males, their numbers being 19, 12, 10, 9. These curiously-shaped knobs do not occur on the ovigerous leg of the female.

The legs are still longer than those of *Nymphon hamatum*. In a female of 12 mm. they measured 46 mm.; in a male of  $9\frac{1}{2}$ , 38 mm. (1 : 3·8 and 1 : 4). The second joint is in the males four times as long as the first, in the females a little shorter, but considerably swollen at the extremity; the sixth joint is the longest, being more than once and a half the length of the fifth; the first tarsal joint is shorter than the second, the claw is almost as long as the first tarsal joint, auxiliary claws are wanting (Pl. II. fig. 5). The first joints of the legs are almost entirely smooth, the hairs increasing in number as they approach the extremity of the leg. The genital openings of the females are very large, and are found on every leg. Those of the males are smaller, and found only on the three hinder pairs of legs (Pl. XV. fig. 9). The colour of alcoholic specimens is light yellowish. (For the larvæ see below.)

*Habitat.*—This fine species was dredged east of Auckland. There are in all twelve specimens, of which only three are females. One of the males was furnished with larvæ clinging to the accessory legs. The depth at which the specimens were found is 1100 fathoms. At the same place two specimens of *Nymphon compactum*, Hoek, were obtained.

Station 168. July 8, 1874. Lat.  $40^{\circ} 28' S.$ , long.  $177^{\circ} 43' E.$  Depth, 1100 fathoms. Bottom temperature,  $2\cdot0^{\circ} C.$  Sea bottom, grey ooze.

*Observations.*—I believe this species with its rudimentary eyes to form the transition from the shallow-water species to the true deep-sea species. The very long coxæ render the species easily distinguishable.

*Nymphon procerum*, n. sp. (Pl. II. figs. 9–12).

*Diagnosis.*—Body extremely slender, smooth; legs hairy; eyes obsolete; auxiliary claws wanting; the second joint of the palpi a little longer than the third, the second joint of the leg longer than the first and the third, the second tarsal joint of the leg a little longer than the first.

*Description.*—The body is very slender, and the lateral processes are separated by large intervals. The proboscis is slender, shorter than one-third of the length of the body, in the middle a little thicker. The cephalothoracic segment is longer than the proboscis. Eyes are wanting; the abdomen is small and bent upwards. The mandibles are very long, the basal joint longer than the rostrum, the second joint also long and slender, the claws very long; the spines of the movable claw are smaller, and closer to one another than are those of the immovable one (Pl. II. fig. 10). The palpi are very slender, much longer than the rostrum; the second joint is a little longer than the third; the fourth and