

Forehead truncated, broad, and emarginate in the middle, posterior extremity narrow, but only slightly tapered. Anterior antennæ (Pl. XLVIII. fig. 10) six-jointed,¹ slender, bearing a few long and slender setæ on the margin and apex; posterior antennæ longer than the anterior, four-jointed, and very slender; first, second, and fourth joints nearly equal in length, third rather shorter, almost devoid of setæ, except that the third joint has three on the margin, the first and second each one, and the last three at the apex; second foot-jaw three-jointed, having a strongly falcate terminal joint; inner margin of second joint having a boss-like dilatation near the apex (fig. 13); anterior foot-jaw (Pl. XLVII. fig. 13) rudimentary. The head and first three thoracic segments usually have a single large oil globule situated near the lateral margin, and the three thoracic segments have likewise each a similar globule in the middle line of the body. The caudal stylets are long, linear, and closely adpressed (Pl. XLVIII. fig. 9, and Pl. XLVII. fig. 14), bearing a very short seta beyond the middle of the outer margin, and two small thorn-like apical setæ. The nervous system (Pl. XLVII. fig. 16) may be seen with great distinctness in the pellucid body of the animal, and consists of a ganglionic central (brain) mass, in which is embedded a pigmented eye-spot; from this centre are given off in all directions numerous nerve-branches, the most conspicuous of these being supplied to the eyes, antennæ, and feet. The genital system (fig. 15) is also very conspicuous, the testis showing as a long fusiform organ on each side, connected by a broad *vas deferens* with the *receptaculum seminis*, which opens into a cloacal pouch.

Habitat.—The gatherings in which this interesting species occurred were from off Kandavu, Fiji; from the North Atlantic, in lat. $5^{\circ} 28' N.$, long. $14^{\circ} 38' W.$; from the North Atlantic, near Canary Islands (February 2 and 16, 1873); and April 28, 1876, near the same latitude; South Atlantic, in lat. $35^{\circ} 25' S.$, long. $23^{\circ} 40' W.$ (Station 132).

Amongst the distinctive characters insisted on by Haeckel as separating his two species *vitreum* and *pellucidum*, one from the other, are the numbers of joints of the anterior antennæ (four in *pellucidum* and six in *vitreum*), and the situation of the thickened portion of the second foot-jaw (at the apex in *pellucidum*, at the base in *vitreum*). In the Challenger specimens I have found the anterior antenna always six-jointed, except indeed in some instances where the joints could not be very distinctly seen, and where perhaps the limb might have been supposed to be four-jointed; closer observation, however, seemed to reveal, though not very plainly, six joints. As to the structure of the second foot-jaw, I have seen no instance of the basal thickening; so that in these specimens the antennal characters of *vitreum* (according to Haeckel) go with the jaw characters of *pellucidum*. Claus, however, seems to have observed both species, and endorses the characters given by Haeckel. The female is unknown.

¹ The antenna is shown in Plate XLVIII. fig. 10, as having seven joints: this is incorrect; the basal joint should be removed.