

antepenultimate each with two long apical setæ. In the *male* the joints are constricted at the points of articulation. I have altogether failed to find the beautifully plumose hairs figured by Lubbock and Dana as belonging to the apex of the anterior antennæ. Inner branch of the posterior antenna eight-jointed, the two basal joints large, last six joints very small and nearly equal. The inner branches of all the swimming feet (fig. 8) are three-jointed; the marginal spines of the outer branches small; terminal spines very slender, scarcely distinguishable from the marginal setæ, but bordered externally with a very delicate faintly pectinated lamina. The feet of the fifth pair in the *male* (Pl. II. fig. 10) are three-jointed, the left limb longer than the right, each bearing a single small apical hair. In the *female* the posterior foot-jaws (fig. 9) have the three proximal tufts of setæ only plumose.

Habitat.—Between Api and Cape York; between Arrou and Banda; off the south of Papua; off Sibrabo Island, Philippines, and in various other gatherings from amongst the Philippine Islands; in lat. $46^{\circ} 46' S.$, long. $45^{\circ} 31' E.$ (Station 146); lat. $47^{\circ} 25' S.$, long. $130^{\circ} 32' E.$ (Station 159); off Port Jackson, at night; between Sydney and Wellington; off Kandavu, Fiji; in the tropical Atlantic off the west coast of Africa, between lat. $3^{\circ} 10' N.$, long. $14^{\circ} 51' W.$ (Station 348); and lat. $7^{\circ} 33' N.$, long. $15^{\circ} 16' W.$ (Station 350); and in lat. $45^{\circ} 31' S.$, long. $78^{\circ} 9' W.$ (Station 303).

It will be seen from the foregoing list, that almost all the Challenger gatherings in which this species was noticed, are from the Malayan and Australasian Seas, the exceptions being those from the west coasts of Patagonia and Africa. Professor Dana's specimens, however, were from the Pacific (Kingsmill Islands) and China Seas; Sir John Lubbock's from the Bay of Biscay, and Dr. Claus's (which as I think are in all probability identical with the present species) from the Mediterranean. There can scarcely be a better instance of the very wide distribution of a species, which is nowhere perhaps very abundant when compared with such as *Calanus finmarchicus*, *Anomalocera patersonii* or *Undina vulgaris*. Further research may perhaps show differences sufficient to require specific recognition, but if so, the relationship between the various species may be expected to be very close indeed, showing not greater divergence than might be the result of prolonged exposure to somewhat different external conditions. The anterior antennæ (Pl. VI. fig. 1) are inaccurately drawn, showing too large a number of joints. When the figure was drawn I had not seen a specimen with perfect antennæ, and the drawing was made up from observations of several animals: the number of joints ought to be twenty-three.

2. *Eucalanus setiger*, n. sp. (Pl. III. figs. 8–15).

Length, 1-7th of an inch (3.5 mm.). Forehead broadly rounded, with little or no constriction behind, rostrum with a long, stout base and slender bifid apex; head not at