

Copilia mirabilis, Dana (Pl. LIII. figs. 1-11).

Copilia mirabilis, Dana, Crust. U. S. Expl. Exped. (1852), p. 1232, pl. lxxx. fig. 14, *a-g*.
 ,, *denticulata* (?), Claus, Die frei lebenden Copepoden, p. 161, pl. xxv. figs. 14-20.

Length, 15-100ths of an inch (3.6 mm.). The first cephalothoracic segment is quadrangular, much broader than, and as long as, the rest of the body, exclusive of the caudal stylets; the last two thoracic segments are much smaller than the rest and are prolonged on the dorsal aspect into a triangular median spine, and the posterior borders of the abdominal segments are denticulated; the last abdominal segment is as long as the preceding five, and somewhat dilated at the distal extremity; the caudal stylets excessively long and slender, almost linear, divergent, about half as long as the body of the animal, and bearing a few very short terminal setæ. Anterior antennæ (fig. 3) six-jointed, small, rather sparingly setiferous, and reaching only about half-way to the posterior margin of the first body-segment. Posterior antennæ (figs. 4, 5) very large, reaching to the hinder extremity of the first segment, four-jointed, and terminating in a strong, curved claw, second and third joints each bearing a strong marginal spine; in some examples (? *males*) this spine is branched in a radiate manner near the base (fig. 5). The swimming feet (fig. 10) are short, the external and internal branches of the first four pairs being three-jointed and equal in length; marginal spines of the external branches obsolete; inner branch of the fourth pair (fig. 11) consisting of one joint only; fifth pair of feet wanting (?), or rudimentary.

Habitat.—This species occurred very sparingly in several gatherings; except in one instance not more than two or three examples were noticed in the material which passed through my hands from any one locality. The following list includes all the gatherings in which the species occurred:—Off Sibago Island, and in several other gatherings from amongst the Philippine Islands; off the north coast of Papua; off Kandavu, Fiji; between Api and Cape York; near the Ki Islands (Station 181); Zamboanga; in lat. 9° 43' S., long. 13° 51' W. (Station 342); in lat. 5° 28' N., long. 14° 38' W. (Station 349); and in lat. 10° 55' N., long. 17° 46' W. (Station 352). It will be seen from this list that all the localities in which *Copilia* was captured may be assigned to two widely distant areas, the most important area including Polynesia and the Malay Archipelago; the other the North Atlantic, off the west of Africa. I have not been able to detect any important differences amongst the specimens taken from the various places, but the action of the preservative spirit has in all cases so destroyed or obscured the more delicate internal structures, that I have been obliged to rely upon the observations of previous writers for descriptions of those parts. In other respects, many of the specimens were in good condition, except as to the setæ of the caudal stylets, none of which appear to be perfect. The mouth-organs are extremely minute, and—in spirit-specimens at any rate—difficult of observation, and I am by no means sure that my drawings of those parts