

2. *Euchæta hessei*, n. sp. (Pl. XX. figs. 1-13, and Pl. XXIII. figs. 11-14).

Anterior antennæ nearly as long as the body, twenty-three-jointed in the *male*, twenty-four-jointed in the *female*, the last joint half as long as the preceding one, provided with long setæ at the apices of the third, seventh, eighth, thirteenth, twenty-third, and twenty-fourth joints, and with very short setæ on the intermediate joints; rostrum long and simply curved; in the *female* there is a very small terminal joint, but this is wanting in the *male*, its place being supplied by a few setæ and a pyriform sensory appendage. Posterior antennæ (Pl. XX. fig. 3) as in *Euchæta prestandreæ*; those of the *female* more densely setose than in the *male*. Mandibles and anterior foot-jaws (figs. 4, 8, 9) as in *Euchæta prestandreæ*. External branch of the maxilla-palp in the *female* (fig. 5 *a*) rudimentary, inner branch (*b*) elongated, digitiform; in the *male* (fig. 6), the maxilla is very small, the biting portion altogether wanting. The anterior foot-jaw is wanting in the *male*, but in the *female* (fig. 7), has the innermost seta of each digit pectinated near the base with a row of short rigid setæ, the rest of the setæ simply plumose: the last seta of the second joint of the posterior foot-jaw bears also a marginal comb-like row of cilia. The structure of the swimming feet is exactly as in *Euchæta prestandreæ*, except as to the terminal spines (fig. 10), which are much more strongly serrated, the number of serratures being from twenty to twenty-two on each spine. The basal joints of the fourth pair of feet in the *female* (fig. 10, *a*) are armed on their internal margins with a comb-like row of about five very broad and strong spines. The fifth pair of feet of the *male* (fig. 11) does not possess any toothed appendage, but in other respects is much like that of the preceding species. The abdomen in both sexes is four-jointed, but much shorter and stouter in the *female* (figs. 12, 13). Caudal stylets about as long as broad; setæ nearly equal in both sexes, scarcely longer than the abdomen. Length, 1-8th of an inch (3.1 mm.). The two specimens taken between Japan and Honolulu were twice this length.

*Habitat*.—This species was found in a gathering from lat. 38° 7' S., long. 94° 4' W. (November 6th, 1875, near Station 295). The captures of Copepoda in this Station consisted almost entirely of two species in about equal numbers:—*Euchæta hessei* and *Calanus valgus*. It occurred also amongst surface animals from lat. 36° 32' S., long. 132° 52' W. (Station 287). Two specimens were found in a surface gathering made between Japan and Honolulu, and a few at Station 352, lat. 10° 55' N., long. 17° 46' W.; between Api and Cape York; and at a Station near the Philippine Islands (January 9th, 1875).

3. *Euchæta pulchra* (Lubbock), (Pl. XIV. figs. 6-9, Pl. XX. figs. 14-19).

*Undina pulchra*, Lubbock, On some Entomostraca collected by Dr. Sutherland, Trans. Entom. Soc., vol. iv., 1856, pl. iv. figs. 5-8, and pl. vii. fig. 6.

Length, 1-6th of an inch (4.2 mm.). Cephalothorax robust, rounded in front, obtusely angulated behind, rostrum short, simply curved. Anterior antennæ as long