the cephalothorax, twenty-four-jointed, many of the joints laterally produced and angulated at the apices, the third, seventh, eighth, thirteenth, seventeenth, twentieth, and twenty-second joints each bearing a very long apical seta, equal in length to about one-third of the antenna; the twenty-third joint (penultimate) has two long and two or three shorter setæ, and in addition to the long setæ the intermediate joints have mostly one or more short ones. In the male the anterior antenna is slightly angulated at the twelfth joint (Pl. XVIII. fig. 8), thickly fringed with short setæ near the base, more sparingly beyond, and has likewise a few scattered longer setæ; these, however, are not nearly so long as in the female; the eighth and ninth joints are coalescent. The mandible in the female (Pl. XIX. fig. 4) is broad and strongly toothed at the apex, palp large, with a broad base and two short biarticulate branches: in the male (Pl. XVIII. fig. 9) there is no biting segment, and the palp is very small: the outer branch of the maxilla is obsolete (Pl. XIX. fig. 5, and Pl. XVIII. fig. 10), and the whole limb is in the male minute. The anterior foot-jaws are of moderate size in the female, but rudimentary Posterior foot-jaws very large in the female (Pl. XIX. fig. 7), with two long in the male. basal and five small apical joints, very small in the male (Pl. XVIII. fig. 12). The outer branches of all the swimming feet are three-jointed, except that of the first pair in the female, which is only two-jointed (Pl. XIX. fig. 8). The inner branches of the third and fourth pairs in both sexes are three-jointed. That of the first pair in the female has one joint only, in the male one (or sometimes two) joints. In both sexes the inner branch of the second pair has only one joint. The fifth pair of the male (Pl. XVIII. fig. 13) are of equal length, that of the left side simple, ending in a very long subulate joint, the basal joint bearing a rudimentary rod-shaped inner branch which is as long as the second joint; the terminal joint of the right foot has one long and slender apical spine and another much smaller one; it has also, springing from its inner margin, a stout appendage, which is dilated and toothed at the apex and fringed on the margin with minute hairs; in the axil between this and the main portion of the limb is a small conical ciliated process. immature fifth feet of Euchæta sutherlandii, Lubbock, are represented in fig. 14). abdomen is sometimes slightly pubescent, the last segment in both sexes always very short, the second caudal seta of the female is extremely long, often longer than the whole body of the animal, the others variable in length but not longer than the abdomen. The two branches of the posterior antennæ (Pl. XIX. fig. 3) are nearly equal in length; the inner branch four-jointed, first and third joints very short, bearing three apical and four The second pair of feet in both sexes (Pl. XIX. fig. 9) differs from the rest lateral setæ. in having the spine-bearing angles elongated into small finger-like processes. The serratures of the terminal spines of all the feet are extremely delicate, about fifty or more on each spine. The external egg-masses are not enclosed in a definite sac, but are loosely aggregated like bunches of grapes.

Habitat.—Off Port Jackson, Australia; between Sydney and Wellington; off Kan-