Fifth Perwopods.—The side-plates small, straight above, otherwise tending to circular in shape. The first three joints of the limb as in the preceding pair, but rather longer, the first joint also rather wider in the upper part. The rest of the limb missing.

Pleopods.—The coupling spines are small but strong, stout at the base, the shaft having on each side in one spine two or three, in the other three or four, retroverted teeth, besides the two formed by the apex; there is but a single cleft spine, the arms of which are long; the first joint of the inner ramus carries plumose setæ below the cleft spine; fifteen joints were counted on the inner ramus, and seventeen on the outer.

Uropods.—The peduncles of the first pair reaching beyond those of the second, but not nearly so far as those of the third, subequal in length to the rami; the rami long, subequal, reaching back nearly to the end of the rami of the third pair, the outer slightly shorter than the inner, not spined along the inner margin, but with fifteen or more spines on the outer; the inner ramus spined along both margins; both rami apically acute; the peduncles of the second pair as long as the inner ramus, which is considerably longer than the outer, spined on both margins, while the outer, which is equally acute, has only a few spines on the outer margin; the peduncles of the third pair much longer than the rami, carinate above, with a few spines along the upper margin; the rami subequal, lanceolate, the adjacent margins in each pair a little convex, with spines only on the lower part, the remote margins straight and spined all along.

Telson very long and narrow, reaching just beyond the peduncles of the first uropods, armed just above its acute tip with two microscopic cilia or setules.

Length.—The specimen, in the position figured, measured, in a straight line from the rostrum to the dorsal apex of the third pleon-segment, a little over two-fifths of an inch.

Locality.—Station 142, off Cape Agulhas, December 18, 1873; lat. 35° 4′ S., long. 18° 37′ E.; depth, 150 fathoms; bottom, green sand; bottom temperature, 47° 0. One specimen, female. Dredged.

Remarks.—The specific name is given in compliment to Mr. E. J. Miers, whose meritorious labours as a carcinologist are well known.

With Leucothoë commensalis, Haswell, from Port Jackson, the present species has many points of resemblance. Mr. Haswell accepts the suggestion of Mr. Miers that his species is only a well-marked variety of the European Leucothoë spinicarpa of Abildgaard. A specimen for which I am indebted to Mr. Haswell's kindness shows the following points of difference from Leucothoë miersi; in the mandibles the secondary plate on the left mandible has its edge divided into eight broad teeth, the spines of the spine-row seem to be less numerous, the third joint of the palp is longer and curved; the first joint of the palp in the first maxillæ has greater width; in the maxillipeds the relative sizes of the various joints are different, the inner plates are differently shaped, their texture