Telson simple, linguiform, apex rounded, armed with several groups of setules.

Pleon segment 3 with posterior edge of epimera straight, posteroventral corner quadrate.

FEMALE: Two specimens possibly carrying 2 to 3 shrunken embryos each were dissected. No brood plates were evident and no sexual differences were observed.

HOLOTYPE: AHF No. 531, male 5 mm. in length.

TYPE LOCALITY: Ellis Boat Landing, Newport Harbor, California (on the south side of United States Highway 101A bridge crossing the channel leading to upper Newport Bay), November 29, 1953, from a formalin washing of sponges attached to floating dock, collected by R. H. Linsley, 7 specimens examined.

MATERIAL EXAMINED: Ellis Boat Landing, July 27, 1951, coll. Dr. John L. Mohr, 1 specimen; dock of Fun Zone Boat Co., Palm Avenue at Bay Front Street, Newport Beach (on bay side) November 29, 1953, formalin washings of sponges, coll. R. H. Linsley, 2 specimens.

REMARKS: This species differs from Anamixis hanseni Stebbing (1897), described from the West Indies, by the stouter sixth article of gnathopod 2 and a different configuration of the palmar teeth. The coxa of gnathopod 2 is narrower (as measured from front to back) and article 7 is more slender than in A. hanseni. The apex of article 5 of gnathopod 1 is blunt and not tipped with a spine as in Stebbing's species.

A. linsleyi differs from Anamixis stebbingi Walker (1904), described from Ceylon, by the shape of the second coxa, by the presence of cusps on the palm of gnathopod 2, and by the lack of diverging ridges on the second article of peraeopod 5.

The writer agrees with Stebbing (1897) that the structure of gnathopod 1 is homologous to that found in the genus *Leucothoe*; Walker (1904) stated that article 4 (the third article under his system of numbering) was obsolete. His species of *Anamixis* lacked the spine-like finger on article 6, thus leading to his statements:

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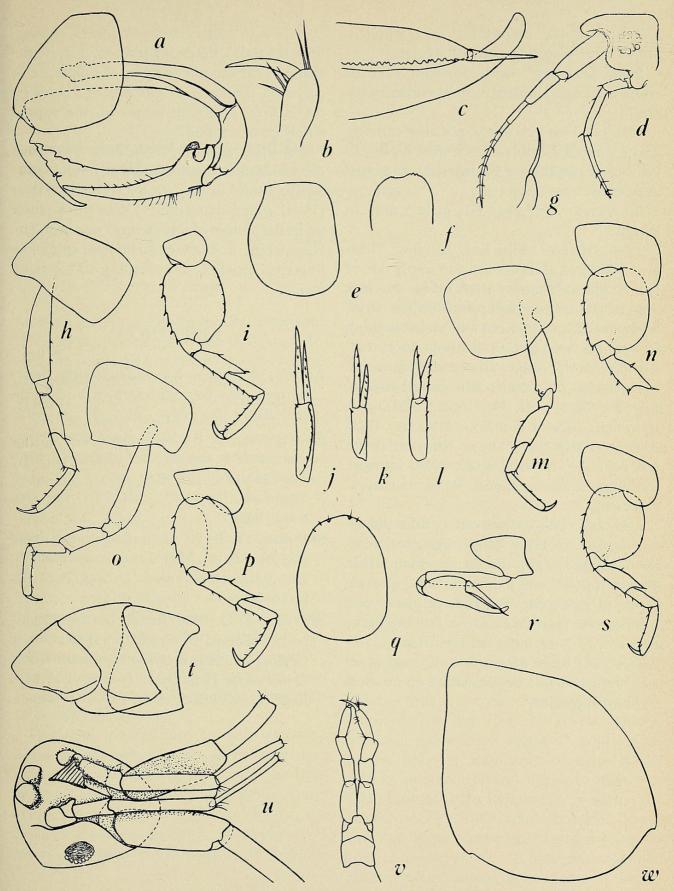


FIG. 2. Anamixis linsleyi, n. sp. Male, 4mm.: a, gnathopod 2; b, end, maxilliped palp; c, end, gnathopod 1; d, head; f, maxilliped, inner plates; g, finger, gnathopod 1; i, peraeopod 5; j-l, uropods 1-3; m, o, p, peraeopods 2, 1, 3; q, telson; r, gnathopod 1; s, peraeopod 4; t, pleon segments 1-3; u, head, ventral; v, maxilliped; w, coxa 2. Leucothoides pacifica, n. sp. e, Coxa 4; h, peraeopod 1; n, peraeopod 3.

Peraeopods 1 and 2 equal in size. Peraeopods 3 to 5 successively slightly longer, second articles broadly expanded.

Uropods with outer rami shorter than inner, inner rami not longer than peduncles; uropod 1 longest, uropod 2 shortest. Telson similar to *Leucothoides pottsi* Shoemaker (1933).

Pleon segment 3 with posteroventral corner of epimera rounded.

FEMALE: Process of article 5 on gnathopod 2 relatively shorter than in male, palm very oblique, serrated, article 7 not stout.

HOLOTYPE: AHF No. 516, male 4 mm. in length.

TYPE LOCALITY: Ellis Boat Landing, Newport Harbor, California (on the south side of United States Highway 101A bridge crossing the channel leading to upper Newport Bay), July 27, 1951, collected by Dr. John L. Mohr, 13 specimens examined.

MATERIAL EXAMINED: Ellis Boat Landing, November 29, 1953, formalin washings of sponges, coll. R. H. Linsley, 20 specimens; dock of Fun Zone Boat Co., Palm Avenue at Bay Front Street, Newport Beach (on bay side), November 29, 1953, formalin washings of sponges, coll. R. H. Linsley, 26 specimens.

REMARKS: This species differs from Leucothoides pottsi Shoemaker (1933) from Tortugas, Florida, by: (1) the convex palm of the male second gnathopod; (2) the stout seventh article of the male second gnathopod; (3) the rounded lower anterior corner of the head; (4) the long peduncle of uropod 1.

The figure of the male second gnathopod shows one of the sponge spicules drawn to the same scale and superimposed on the coxal plate. This particular spicule was removed along with others from the "brood pouch" region of the male. This type of calcareous spicule indicates that some of the specimens obtained by formalin washings were from the smaller calcareous sponges present in some samples.

Family ANAMIXIDAE

Anamixis linsleyi, new species Fig. 2a-d, f-m, o-w

DESCRIPTION OF MALE: Head fused with first peraeon segment so that each is not freely movable, but lines of articulation not obscured; rostrum blunt; eyes large, composed of few facets; lateral lobes not produced; front of head between antennae bears a low but sharp carina.

Antenna 1 longer and stouter than 2, as long as head and first 3 peraeon segments; accessory flagellum minute, barrel-shaped, armed with 2 setae; articles of peduncle successively shorter, primary flagellum not as long as peduncle, composed of 9 to 11 articles.

Antenna 2 with article 5 shorter than 4, flagellum shorter than article 5 of peduncle, composed of 4 to 5 articles.

Mouth parts degenerated: on the underside of the head is a single, thin, pointed lamella, possibly representing the fused mandibles. Maxillae 1 and 2 obsolete.

Maxilliped with inner plates fused and short, in some larger specimens (5 mm.) completely obsolete; outer plates obsolete; article 5 of palp slender, curved, armed on inner edge with short hairs.

Gnathopod 1 complexly chelate, small, the coxal plate produced forward conically and partially concealed by the large second coxa; inner edge of article 6 serrulate, article 7 small, spinuliform; chela of article 5 retruse and blunt at apex.

Gnathopod 2 complexly chelate, article 5 produced forward into a conical appendage nearly as long as article 6; palm not distinct from hind margin, armed with several cusps, the distal one the longest; article 7 closing on process of article 5, inner edge with 3 cusps, the distal one armed with 2 spinules.

Peraeopods as figured.

Uropods 1 and 2 with inner rami longer than outer, both armed on upper edges with spinules. Uropod 3, rami subequal in size.

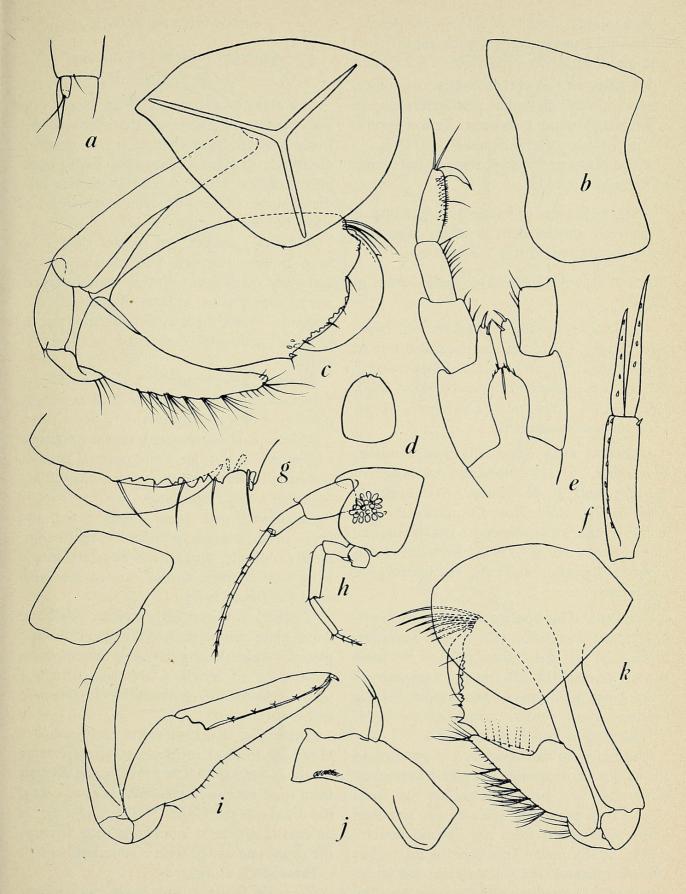


FIG. 1. Leucothoides pacifica, n. sp. Male, 4 mm.: a, accessory flagellum; b, pleon segment 3, left; c, gnathopod 2; d, telson; e, maxilliped; f, uropod 1; g, gnathopod 2, palm; b, head; i, gnathopod 1; j, mandible. Female, 4 mm.; k, gnathopod 2.



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