

synonym of Kroyer's species, and if he is correct in this our species is undoubtedly distinct"; *Vertumnus serratus*?, Goës (Fabricius sp.), (*Acanthonotus serratus*, Stimpson), "Our specimens all differ from the descriptions and figures given by Boeck and Kroyer in the armature of the posterior margin of the third segment of the abdomen. In our specimens the upper process from this margin is armed with four or five teeth above and at the tip, while the lower process is armed with five or six teeth similarly situated, but with no teeth on the lower margin except just at the tip. In Kroyer's figure (Grönlands Amphipoder. plate ii. figure 8) the upper process is represented as terminating in a single tooth and the lower process as toothed along both sides; Boeck's description agrees with this, except that he says there are two teeth at the tip of the upper process"; Boeck afterwards changed the name to *Acanthonotozoma serratum*; *Acanthozone cuspidata*, Boeck; *Byblis gaimardi*, Boeck (Kroyer sp.), "the *Ampelisca Gaimardi* of Bate, and Bate and Westwood, is not this species, but a true *Ampelisca*. All the species of this subfamily are undoubtedly tube dwellers. . . . In this species, the glands which secrete the cementing fluid are situated principally in the meral and basal segments of the third and fourth pairs of thoracic legs;" *Xenoclea megachir*, Smith, n. s., Pl. IV [III], figures 1 to 4. "'Pedes 3tii et 4ti paris articulo lmo latissimo' of the generic description would scarcely apply to our species, but in all the other generic characters it agrees perfectly, as it does also with the diagnosis of the subfamily Photinæ, except that the mandibles each bear six serrated spines instead of the usual number, four." In this species Professor Smith noticed a peculiar "glandular structure filling a large portion of the third and fourth pairs of thoracic legs." "The terminal segment (dactylus) in these legs is not acute and claw-like, but truncated at the tip and apparently tubular." "A large cylindrical portion of the gland lies along each side of the long basal segment, and these two portions uniting at the distal end pass through the ischial and along the posterior side of the meral and carpal segments, and doubtless connect with the tubular dactylus. There can be no doubt that these are the glands which secrete the cement with which the tubes are built, and that these two pairs of legs are specialized for that purpose." In *Amphithoë maculata* the gland is in the middle of the basal segment. Other arrangements with reference to this gland are mentioned for *Cerapus rubicornis*, *Ptilocheirus pinguis*, *Byblis gaimardi*, and a species of *Ampelisca*.

1874. SMITH, S. I.

Tube-building Amphipoda. The Annals and Magazine of Natural History. No. 81. September 1874. Vol. XIV. Fourth Series. London, 1874. p. 240. Silliman's American Journal, June, 1874.

The cement-glands are described in *Xenoclea* sp., and noted in *Amphithoë maculata*, *Ptilocheirus pinguis*, *Cerapus rubicornis*, *Byblis gaimardi*, *Ampelisca* sp. In the *Cerapus* "the orifice in the dactylus is not at the very tip, but subterminal on the posterior side." In *Ampelisca* and *Byblis* "the remarkable elongation of the two distal segments in the third and fourth pairs of legs is perhaps a special adaptation to enable them to reach back over the deep epimera." See Note on Smith and Harger, 1874.